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Embodiment in Art Practice

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FROM THE EDITOR

Embodiment in Art Practice

Michaela Chan, MFA

Artistic expression is necessarily embodied. Each art form entails different sets of movements that an artist learns through repetition and feedback. Like a health care practitioner, an artist monitors and responds to the body. By "knowing thyself" through expressions of embodiment, an artist can investigate ethically, socially, and culturally fraught dimensions of one's own personal health care story. Long recognized as therapeutic, art making also can disrupt expectations for bodies. The late artist, Lisa Bufano, created, among other works, performance pieces that highlighted mobility despite her double lower-leg amputation.

Among an artwork's lasting impressions might be an acknowledgement of what the art is made of. Using the body's leavings—shavings, clippings, flakes—artists can highlight the body's natural degradation. This theme variously compliments and contradicts the aims of health care; although mindfully accepting one's impermanence can be restful, health care practitioners tirelessly work to extend lifespans and to keep the body from emulsifying.

Some artworks' material choices demand reckoning with the political realities of health care. In Gwyneth Zeleny Anderson's *Menstrual Cycle* (2023), an angry, flower-headed cartoon painted with menstrual blood stomps around the United States capitol. Zeleny Anderson writes: "My rage about the overturning of *Roe v Wade* feels cartoonish and justified; I want to bleed on it all."[1]

The body inspires concepts, enacts practices, and constrains processes. Like Olympic athletes whose sports are apparent from the mere silhouette of their figures, so, too, may the medium of the artist shape her body. The thumbnail of a book binder is like a bone folder. The calluses of a guitarist are like leather. When heavy metals were more commonly used in paints, the mind of a painter might have been warped by toxins. The effects of an art practice on a body can be more fleeting; as a cartoonist sketches characters, her face subconsciously scrunches into grimaces, scowls, and jubilation.

This theme issue, "Embodiment in Art Practice," welcomes questions about how art affects the body, such as how to address tension in artistic practices between art's physical demands and its potential to offer healing to creators, viewers, or readers. How should a practice adapt to the changing abilities of a body? What should we know about

how art practices influence embodiment experiences? What are the key lessons health care can glean from these investigations?

By centering the body, the contributing artists broaden and deepen our understanding of intersections among ethics, aesthetics, and health care. Archives of artistic work, such as this theme issue, provide insight into changing reactions to, reflections on, and recordings of embodiment. When artworks are curated for discourse on health care ethics, a shared goal between art and medicine is highlighted: to better understand human experiences and shape best practices accordingly, in human-centered ways. The works featured herein illuminate the humanistic impulses common among artistic creation, caregiving, and research.

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Michaela Chan, MFA is a poet-cartoonist living and teaching in Rochester, New York. While a student at the School of the Art Institute of Chicago in Illinois, she was an early Art of Medicine intern at the *AMA Journal of Ethics*.

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MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

Lessons in Embodiment From the World of Physical Theatre

Zoe Rose Kriegler-Wenk, MFA

Abstract

This article considers how the concept of *embodiment* is used in artistic practices to promote mind-body integration, kinesthetic empathy, and trust, each of which can be drawn upon to strengthen patient-clinician relationships. This article also offers examples from the world of physical theatre to help clinicians and patients notice, communicate, and feel more comfortable about their embodied experiences during clinical encounters.

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Embodiment, Theatre, and Medicine

Few artistic pedagogies and practices center the body to the extent of physical theatre. This approach to performance recognizes physical impulse as the point of departure for creative exploration. Challenging the traditional playwright-director-actor hierarchy, physical theatre begins with embodied improvisation and builds in a nonlinear fashion toward composition.[1,2,3] This practice further encourages a supplementation of scholarly, dramaturgical research with kinesthetic research practices.[3] Just as physicians study the body in the hopes of healing illness and injury, so do physical theatre-makers study the body in the hopes of uncovering and expressing artistic meaning. Both are intimate endeavors that require a level of physical and emotional trust that goes beyond most professional requirements. *How might we draw on what we know about the values of embodied connection to strengthen patient-physician trust and promote intimacy that can help patients feel safe in clinical settings?*

Embodiment Ethics

Embodiment is central to health care ethics. The intimacy and urgency of the body's demands and its unique position in defining our very sense of self[4] make embodiment ripe for ethical inquiry. Whether we come to this inquiry from a background in the arts or medicine, it is essential to avoid the assumption that all people experience pain, for example, in the same way because it glosses over meaningful differences in how people are embodied. Health professions education has taken steps toward acknowledging the importance of differing contexts in health care by foregrounding social determinants of health as essential factors in how lived experience directly influences a person's

physical and emotional health.[5] Acknowledging an individual's uniqueness does not, however, negate the importance of fostering meaningful connection with others whose lived experiences may differ. Western social, normative, and cultural expectations have prompted us to strive for autonomy, and yet the ethics of embodiment ask us to admit a certain level of dependence on others, which points to the importance of developing trusting relationships with caretakers.

The value placed on strong embodied relationships connects directly to physical theatre's emphasis on collaborative creation and ensemble-building through improvisation. Scientific research has revealed the importance of building trust and intimacy through the practice of witnessing and replicating physical action. For example, it is widely acknowledged that imitation of body posture plays a large role in infant-mother bonding, fosters social communication, and builds empathy.[6,7] Synchronized action is a foundational component of social exchange, cooperation, rapport, and social-cognitive functioning.[8] Synchronous activity has also been shown to increase cooperation and compliance, boost trust, foster joint action, and increase compassion and altruism.[8] Interpersonal synchrony can be achieved through a range of activities: walking, clapping, rocking, and so on. Rituals of collective rhythmic coordination (chanting, dancing, singing, drumming) have played important roles in cultural evolution and promote prosocial behavior, oxytocin production, and even pain reduction via group synchrony.[7,8]

Physical theatre pedagogies also encourage exploration of group rhythm (eg, improvised percussion, songs, or soundscapes composed by layering together sounds produced by many ensemble members) and mirroring (eg, watching an ensemble member's physical improvisation and then performing it back to that person). Group rhythm is as much a practice of listening as it is a practice of expression. Trust in ensemble members is built through the practice of witnessing and being witnessed by others, which has been proven to have a therapeutic effect within the context of trauma-informed care.[6] As a discipline, physical theatre celebrates diversity of embodied experience by promoting a state of openness that allows for trusted connection with others. The goal of engaging in safe physical collaboration lends itself to the creation of a "collective body"[9] that is treated with the same respect and reverence as the individual body. In this way, embodiment ethics and physical theatre share a central focus on fostering physical and emotional trust via intentional physical attunement.

Physical Theatre Pedagogies and Practices

French theatre practitioner Jacques Lecoq is a prime example of a physical theatre practitioner whose work is built on a foundation of anatomy and movement. His training in anthropology prompted him to engage in the "anatomical study of the body in an aesthetic context."[1] At the end of the Second World War, Lecoq did rehabilitation work with disabled veterans. It was here that he observed how to organize the body to achieve mobility in the face of injury and learned to teach others how to do the same.[10] Although Lecoq was not a medical professional, his deep belief in the value of paying close attention to the nuances of the anatomical healing process ties him to a shared value system based on the central tenet of embodiment.

Lecoq worked from a foundational understanding that gesture precedes spoken language[2,10] and that it is the actor's body and its movement through space that generate meaning.[10] By reenacting specific physical movements while altering other variables, such as rhythm or intensity, he found embodied meaning. Lecoq's focus on

the language of the body and belief in its preeminence over the written word acknowledges the potential for physicality to reveal a deeper truth than verbal communication and underscores the cross-disciplinary importance of physical cues, such as body language, posture, and eye contact.

Lecoq was not alone in his pedagogical emphasis on embodiment. Austro-Hungarian choreographer Rudolf Laban created his own grammar of movement with a goal of physical fluency, which he believed led to limitless expressivity.[1] Polish practitioner Jerzy Grotowski believed that, in order to reach a state of presence, the actor must follow their physical impulses to eradicate a series of blocks within themselves (*via negativa*).[1] Russian-American actor-director Michael Chekhov focused on enlarging the actor's physical experience in connection with their psychology (psycho-physical action) to engage the actor's full self.[1] Japanese writer-director Tadashi Suzuki built on a tradition of Noh theatre and centered the "art of walking"[11] as the basis of stage performance. American directors Anne Bogart and Tina Landau developed a pedagogy based on the Viewpoints of Time (tempo, duration, kinesthetic response, and repetition) and Viewpoints of Space (shape, gesture, architecture, spatial relationship, and topography) as the building blocks of performance, which they believed extended beyond theatre training into everyday expression and perception of physical communication.[12]

Traditional dramaturgy is beginning to expand to encompass more body-centered approaches, with some practices going so far as to draw inspiration from specific anatomical systems[13] or integrate brain mapping based on sensory input.[14] Beyond promoting performative presence, these practices generate internal awareness, which can translate to increased ability to connect with and demonstrate empathy for other people.[14] Whether by removing obstacles and overcoming habitual patterns or tuning into psychological and imaginative impulses, most physical theatre pedagogies share a common goal of cultivating embodied awareness (of the body's inner sensations and their relationship to the temporal and spatial context) as the foundation of nonverbal communication.

There exists an underutilized opportunity to employ the body's communicative potential outside of a strictly theatrical discipline—specifically, in medicine. Attention is more often placed on verbal communication between patient and physician when, in fact, small adjustments in posture, eye contact, or quality of touch could go even further toward building a trusting professional relationship. It would be beneficial for clinicians to develop an awareness of the importance of fostering kinesthetic empathy, especially in a field centered on the goal of healing physical affliction.

Patient-Clinician Nonverbal Communication

Empathy is built between patient and clinician when turn-taking occurs between conversation partners and both parties are aligned in speaking and listening (ie, lexical alignment).[15] In addition to cultivating an awareness of verbal synchrony, adjusting to the patient's posture and movement is a sign of deeper empathy and attunement. As Finset and Ørnes note: "reciprocal nonverbal, perceptual-motor mimicry may facilitate the smoothness and mutual positivity in face-to-face interaction."[15] Goldstein et al define *kinesthetic empathy* as "awareness of the dynamic interactions between self and other, i.e., movement sensations in response to someone else's body movements or postures."[7] This kind of physical empathy is communicated via eye contact, supportive touch, smiling, nodding, and engaged posture with a forward trunk lean.[7] It is easy to underestimate the impact of the story our bodies are telling, but awareness of these

physical cues is especially important in a clinical setting, where the patient enters the situation with a certain amount of vulnerability. A clinician's ability to make a patient feel safe depends greatly on embodying a nonthreatening physical presence. Cultivating this type of presence in a clinical setting requires the same set of tools employed by physical theatre practitioners.

- *Breath*. The basis of grounded physical attunement lies in the breath. It is helpful to pay attention to the rhythm and pattern of the breath before rushing into physical movement. A consistent breath pattern allows the clinician to feel more grounded and gives patients a dependable rhythm that they can synchronize with to calm tension within their own bodies.

- *Sensation*. Expanding outward from the breath, the clinician can then take stock of internal physical sensation. Awareness of the location of tension in the body, for example, indicates to the clinician which muscles may need relaxing before they can physically articulate a sense of safety to an incoming patient.

- *Environment*. Moving beyond internal sensation, it is beneficial for a clinician to broaden the scope of their awareness to the temporal and spatial context the body exists within. Noticing how they respond to the environment around them opens the door for greater empathy with how the patient may feel entering their office, potentially for the first time.

- *Movement*. Once awareness has been expanded to the environment, movement can be introduced. The physician may use specific gestures or postures that encourage reciprocal expressivity and feelings of physical safety in the patient.

- *Connection*. These preliminary steps make the transition to relational interaction that much easier. Eye contact and consensual touch will feel more natural with a foundation in embodied attunement.

Clinicians can use these key ideas from physical theatre pedagogies to facilitate embodied presence and awareness of how their kinesthetic capacity for empathy—which is especially important in caring well for patients—fosters connection and intimacy that helps patients feel safe.

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Zoe Rose Kriegler-Wenk, MFA is a writer, editor, and an interdisciplinary theatre-maker. She is a graduate of Smith College (BA, English and theatre), Arthaus Berlin (embodied dramaturgy certificate), and Columbia College Chicago (MFA, European devised performance practice), and is the senior editorial assistant at the *AMA Journal of Ethics*. Her work appears in the *Athens Journal of Humanities and Arts*, *European Stages,* and *Enchanted Living* and has been featured in 2 recent anthologies; *Theatre Responds to Social Trauma: Chasing the Demons* (Routledge, 2024) and *Essays on Psychogeography and the City as Performance: Drifting Through Wonderlands* (Cambridge Scholars Publishing, 2024).

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MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

Psychogeography as Embodied Connection to Place

Zoe Rose Kriegler-Wenk, MFA and John C. Green, PhD

Abstract

This article introduces *psychogeography* as a research method that relies on embodied practices of drifting (*dérive*) through a city, which are followed by subsequent creative cartography. Mapping and documentation that follow *dérive* promote fuller understanding of persons' patterns of embodying sensory data from urban environments. This article then applies key ideas from psychogeography to urban planning and public health.

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As soon as I step outside, I am met with an onslaught of sensory data. The sunlight through the leaves, the smell of recently bloomed roses, the constant buzz and chirp-chirp-chirp of springtime creatures, a child's garden strategically set to appeal to the fairies. A neighborhood cat follows me a few paces down the sidewalk hoping for a scritch behind the ears—I happily oblige.

Litter and sound increase as I near a busier road. Blue Moon bottles and Big Gulp cups; a billboard of Jennifer Anniston overlooks the intersection like a commercial Goddess of late 90s nostalgia. I scribble notes as I walk, sweat dripping from the backs of my knees, chest still tight with the memory of winter.
Zoe Rose Kriegler-Wenk, 2024

Enter, Psychogeography

In the summer of 1957, a group of avant-garde thinkers, artists, and political activists met to form the Situationist International movement under the leadership of Guy Debord.[1] Their declared aim was to revolutionize everyday life by transforming the urban environment from what they saw as the prevailing spectacle of alienated labor and passive consumption into a zone of adventure where citizens would encounter the city in playful rather than rational terms. They developed a process of arts-based embodied research, which they defined as *psychogeography*.

> Psychogeography could set for itself the study of the precise laws and specific effects of the geographical environment, whether consciously organized or not, on the emotions and behavior of individuals. The charmingly vague adjective *psychogeographical* can be applied to the findings arrived at by this type of investigation, to their influence on human feelings, and more generally to any situation or conduct that seems to reflect the same spirit of discovery.[2]

At the heart of psychogeographical practice lies the *dérive* (drift), "a technique of rapid passage through varied ambiences."[3] By walking purposefully through the urban landscape in a state of heightened awareness, the *dériveur* remains open to and present with the sensory input they receive from their environment. The creativity that is sparked by this process substantiates a deeper connection between walking, creative output, and embodied cognition.[4] While it is well documented that walking has many health benefits (improved circulation; improved bone, joint, and muscle strength; improved sleep; slower cognitive decline; improved immune function; and longer lifespan[5,6]), it is the emphasis on our connection to the urban environment that makes psychogeography a fruitful embodied approach to collecting experiential data, one that recognizes the complexity of the relationship between the built environment and the human body.

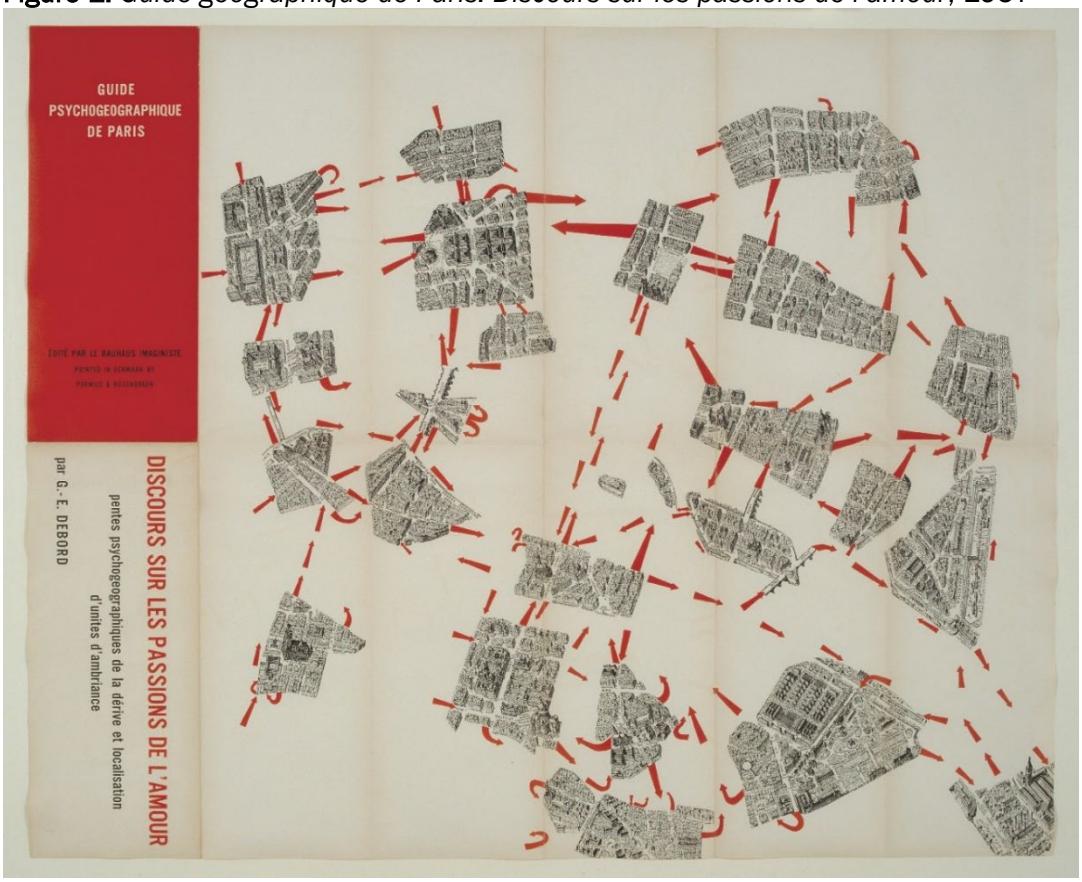
Architecture and medicine have a rich and often parallel history. Renaissance doctors and architects each understood their subject's interior by slicing sections into the whole: dissecting the human body to learn more about its function and dissecting an architectural design into interior sections to help construct the building.[7] Leonardo da Vinci recognized the potential for the art of architecture to benefit from the science of medicine and vice versa, as architectural interiors often appeared beside anatomical drawings in his sketchbooks.[7,8,9] X-ray technology appeared in tandem with modern architecture that unveiled progressively more of the interior of the structure to the outside gaze.[8] The parallel evolution of medicine and architecture demonstrates that our bodies are connected to our urban environments not only because of our proximity to the buildings in which we live and work, but also because of a cross-disciplinary historical narrative.

The rest of this article examines the body's connection to place—specifically, urban environments—through the lens of psychogeography and introduces the potential for rounding out quantitative geospatial data in public health with arts-based embodied research.

Cartography as Embodied Documentation

Mapping was adopted by the Situationists as a technique by which to record the spatial field of a *dérive*, beginning with the *dériveur*'s point of departure and extending out to the maximum area to be covered—from a single neighborhood to an entire suburb or section of the city. A process indebted to the earlier urban explorations of the Surrealists, cartography as embodied documentation was also influenced by the research of Chombart De Lauwe, who believed that "an urban neighborhood is determined not only by geographical and economic factors, but also by the image that its inhabitants and those of other neighborhoods have of it."[10] Figure 1 is a collaged map from the cover of Guy Debord's *Psychogeographic Guide to Paris*, which provides a visual example of the Situationists' process of embodied mapping that inspired subsequent psychogeographic practices.

Figure 1. *Guide geographique de Paris. Discours sur les passions de l'amour*, 1957



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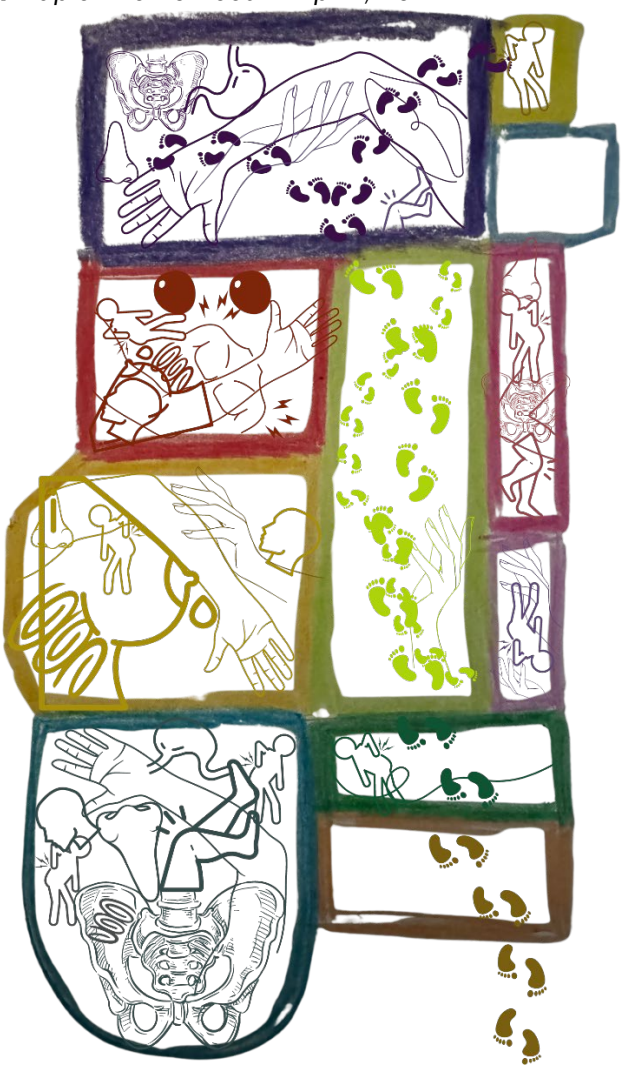
Psychogeography utilizes mapping to document how the cumulative effects of architecture, street layouts, crowd patterns, weather variations, and visual, aural, and olfactory stimuli impress themselves upon the psyche. The practice of integrating walking and mapping has since been adopted in a wide range of contemporary artistic practices.[11] While this approach to data collection and documentation is both intentionally unpredictable (impulse and play are encouraged) and specific to the individual *dériveur*, it would be wrong to discount its value in a society that tends toward an overreliance on dehumanized data points. Figure 2 shows how an artist applies a psychogeographic approach to mapping her physical relationship to the architecture of her home.

Figure 2. *Map of Motherhood in Apt 1*, 2024



Reproduced with permission of Katherine Tanner Silverman.
Map hand-drawn by Katherine Tanner Silverman using crayon enhanced by Canva after drifting through her Chicago apartment with her 1-year-old son. The map displays a color-coded collection of footprints and of body parts regularly used in each room. The size of the body parts suggests what the room is used for and who it may belong to, lending itself to an interactive game for the reader.

In an ever-expanding discussion of social determinants of health, geospatial determinants ("home, the neighborhood, the built environment, and other location characteristics"[12]) are gaining traction as essential components of a comprehensive understanding of public health.[12,13] Mapping is a common tool to track the spread of disease,[12] and recent publications advocate its increased value and use for individual patient care.[14] Technologically advanced geographical information systems allow location-specific data to be collected and mapped at record speed, and geospatial analysis is being integrated into public health curricula across the United States.[13] These scientific approaches are intended to produce and analyze large samples of quantitative data. In contrast, the psychogeographic approach to mapping produces a unique snapshot of qualitative data, the application of which can be beneficial in holistic approaches to urban health.

In an attempt to distill the concept of psychogeography, author Karen O'Rourke summarizes the intention behind the practice with the phrase, "remaking the world."[11] This lofty goal is shared across disciplines that seek to build new systems to better serve their communities. Psychogeography is, at its root, an attempt to heal the city by empowering communal agency, because residents are more likely to advocate for positive change in their cities if they are emotionally and physically connected to those places. In this way, embodied engagement with the city has the potential for meaningful applications to the broader canvas of urban design and public health.

Applications of Psychogeography to Urban Planning and Public Health

Jane Jacobs, writing in the 1950s on urban development, celebrated what she called the "pavement pounding city planner"—individuals who get to know parts of a city by walking through it—noting that "the walking and the good planning are two sides of the same attitude."[15] This approach goes hand in hand with public health, because addressing issues of urban planning has direct consequences for the health of the populations living in the communities affected.[16,17,18,19] Some researchers are already employing methodologies with psychogeographic qualities in their work. For example, wearable mobility sensors have been attached to study participants to gather data on the effort needed to walk through sections of the city. The intention of the study was both to help the individual create a customized mobility plan and to make the case for improvement of physical structures throughout the neighborhood.[19] The integration of embodied approaches to data collection should be encouraged, with the priority placed on research methodologies and policy initiatives that engage the physical environment they seek to improve. The practice of embodied walking and the focus on the body's relationship to architecture and environment remind those working in the public health sphere about the value of on-the-ground embodied research for crafting holistic approaches to community well-being.

Conclusion

Interaction with and documentation of the urban environment shed light on the depth of connection between the body and the spaces it inhabits. Psychogeography requires establishing a dialogue between our internal and external spaces. Facilitating an openness to and awareness of environmental sensory input actuates the agency of the individual and promotes the goal of transforming the urban environment for the better. The tandem histories of architecture and medicine provide a unique perspective of the city as a macro-body in need of healing, one whose treatment has the potential to heal not only itself, but also the human bodies who reside within it.

I'm less careful to follow my route on the way back; less focused on recording every detail.

Cars screech to my left as I run my fingers around the stone wall of a cemetery, prying a piece free to take home with my other withered treasures.

A memorial to a child outside an apartment complex gives me pause. The weary stare of an elderly resident sets my feet in motion once more.

A magnolia tree reminds me of my late grandmother; how we used to climb to the roof from the tree in her front yard.

The sun is setting, and the sky is radiant. Beams of gold light shoot out from the clouds over the drive-through White Castle, a fast-food fairytale.

I turn towards home (Zoe Rose Kriegler-Wenk, 2024, unpublished).

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Zoe Rose Kriegler-Wenk, MFA is a writer, editor, and an interdisciplinary theatre-maker. She is a graduate of Smith College (BA, English and theatre), Arthaus Berlin (embodied dramaturgy certificate), and Columbia College Chicago (MFA, European devised performance practice), and is the senior editorial assistant at the *AMA Journal of Ethics*. Her work appears in the *Athens Journal of Humanities and Arts*, *European Stages*, and *Enchanted Living* and has been featured in 2 recent anthologies; *Theatre Responds to Social Trauma: Chasing the Demons* (Routledge, 2024) and *Essays on Psychogeography and the City as Performance: Drifting Through Wonderlands* (Cambridge Scholars Publishing, 2024).

John C. Green, PhD is a stage director and adjunct professor of theatre at Columbia College Chicago. His latest book is *Essays on Psychogeography and the City as Performance: Drifting Through Wonderlands* (Cambridge Scholars Publishing, 2024). His other publications include *Mnemodrama in Action: An Introduction to the Theatre of Alessandro Fersen* (Cambridge Scholars Publishing, 2019), "The Hunchback Variations" in *Music on Stage* (Cambridge Scholars Publishing, 2015), and "Going Back to Dionysus" in *(Dis)placing Classical Greek Theatre* (University Studio Press, 1999). His award-winning productions have been staged in Europe, the United States, the United Kingdom, and Australia.

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MEDICINE AND SOCIETY: PEER-REVIEWED ARTICLE

Narrative, Embodiment, and Health

Jake Young, PhD, MFA, MPH

Abstract

This article investigates the importance of storytelling for human well-being. Special attention is given to the roles storytelling has played in human evolution, how sharing stories informs embodied experiences, and the role of storytelling within medicine to promote health.

The American Medical Association designates this journal-based CME activity for a maximum of 1 AMA PRA Category 1 Credit™ *available through the* AMA Ed Hub™. *Physicians should claim only the credit commensurate with the extent of their participation in the activity.*

Sharing Stories

Stories have always been a part of human well-being. They connect us to others, help us process our own lived experiences, and facilitate the creation of collective values. Sharing stories is a way to connect to others, to adopt a vulnerability that allows us to see and be seen more clearly. Because of this emotional vulnerability, stories can be dangerous, too. We take a risk when we open the narratives of our lives up to others, but not doing so can be even more devastating, leading to isolation, loneliness, and the loss of a sense of community or belonging. Today, narrative-based practices of medicine aim to provide practitioners with tools from narratology and related disciplines for enacting stronger ethics-oriented and patient-centered care during clinical encounters.[1,2,3] Critical to these undertakings is the admission that the importance and value of patients' stories have not been sufficiently recognized as central to medicine.

Stories' Evolutionary Importance

In many Indigenous cultures, stories have long been recognized as medicinal for their capacity to impact how we feel and to become linked to ritual, interpretation, and belief.[4,5,6] While narrative medicine and writing therapies have explored the healing powers of storytelling over the past few decades, the root of stories' role in human health has origins deep in our evolutionary past.

Many of the purported benefits of narrative-based medicine (such as increased reflection, divergent thinking for problem solving, and empathy[7,8,9,10,11]) parallel evolutionary theories about why humans became storytellers in the first place. Proposals for the emergence of storytelling include that it developed as an adaptation for counterfactual thinking to help people work through possible scenarios in order to better respond to them in real life.[12] Others have posited that storytelling likely evolved as a

form of cognitive play that helped to expand our ancestors' cognitive abilities.[13,14] A crucial aspect is thought to have been the ways in which storytelling—and listening—provides a space for people to safely navigate emotions, both their own and those of others (real and imaginary).[12,13]

From an evolutionary perspective, stories are tools for expanding a theory of mind about others' interiority, for developing our own emotional maturity, and for promoting group cohesion through shared meaning-making.[15] Stories evolved because they are beneficial at individual, interpersonal, and sociocultural levels. Good stories—those that offer the potential for a healing encounter—reach back through evolutionary time to connect listener and teller alike to our shared human history. The healing capacity of stories lies in our embodied experience and in our exchange of them, and the impact that stories can have on both storytellers and listeners reveals that good stories have always been good medicine.

Embodied Meaning and Health Care

Our emotional responses to stories—and their neurological underpinnings—are a reminder that our experiences of narratives are inherently felt and embodied. Our experience of the world is filtered through our emotions, and because our responses to stories are aesthetic, inherently connected to our emotional reactions, stories cannot help but constitute a meaningful part of our world.

Emotions are a form of meaning that give rise to core values; stories are, in effect, tools for the creation of shared emotional experiences and thus shared moral values because they teach us how to act in a social world.[16,17] As Gottschall writes: "the human mind was shaped *for* story, so that it could be shaped *by* story."[18] And we are shaped not only by the stories we hear but also by the stories we tell.

People experience the world through narrative, and so to heal and to be healed requires narrative understanding. Charon writes: "The effective practice of medicine requires narrative competence, that is, the ability to acknowledge, absorb, interpret, and act on the stories and plights of others."[19] Charon goes on to assert that narrative competence crucially enables physicians to practice medicine with greater empathy, reflection, professionalism, and trustworthiness.[19] "Medicine is a narrative art," writes Pollock, as "physicians have always practiced the craft of narrative as a central feature of professional practice."[20] Narrative medicine arose as a patient-centered model of care that recognizes the importance of narrative knowledge. Narrative knowledge is of course embodied knowledge, as the narratives of our lives are tied to our physical experiences. Varela et al explain: "knowledge depends on being in a world that is inseparable from our bodies, our language, and our social history—in short, from our *embodiment*."[21] A basic premise of narrative medicine is that stories can be therapeutic, affecting our bodies, minds, and experiences.

Stories Influence Health

How and in what contexts stories can be healing has become an increasingly studied topic in medical research. Although more research is needed, studies show that creative writing exercises confer a wide range of benefits to both medical professionals and patients. For health professionals, exposure to writing has been found to increase empathy, emotional awareness, emotional intelligence, reflection, and divergent thinking.[7,8,9,10,11] For patients, narrative writing has been found to create a space for self-

reflection and to distract from symptom burden, leading to reduction in fear, sadness, anger, worry, and fatigue and to the promotion of empathy and resiliency.[22,23,24,25,26,27]

Ultimately, narrative-based clinical practices aim to enhance connection and understanding among everyone involved. Charon writes: "narrative medicine focuses on our capacity to *join* one another as we suffer illness, bear the burdens of our clinical powerlessness, or simply, together, bravely contemplate our mortal limits on earth."[28] It is this bridging of individuality, Charon asserts, that we all desire and which is "the ultimate goal of narrative medicine: affiliation."[28] Research has shown that patients' stories can be powerful instruments, not only within their own clinical encounters but also for helping other patients with similar illnesses and experiences.[29] While narrative approaches are not a panacea for clinical encounters, they are a reminder that consultations with patients are pivotal opportunities for generating shared empathy and medical knowledge.[30]

Today, narrative medicine and therapies incorporating writing, art, and other narrative techniques are bringing traditional, Indigenous understandings of stories as medicine into modern health care settings. Many see this development as a corrective for the de-professionalization of medicine that has resulted in a reduction in time spent with patients, whereby every interaction is a data point and health professionals feel they are treated more like mechanics than healers.

Embodied Stories

Narrative medicine and narrative therapies are a reminder that we all have stories, and stories are powerful. Stories remind us that others matter, that their struggles are just as real as our own, and that by sharing stories we share what is important to us. Sharing stories is a way to create shared values through empathy and understanding. Humans evolved with and through stories, as stories shaped and transformed our perceptions and values. Stories matter because they have always mattered.

In health care, we need to make more time and more space for the sharing of stories. If we wish to heal the people who need help the most, we need, more than ever, to listen to them tell their stories (and, with their permission, share their stories, too). Stories help us with understanding because we are made of stories—stories told in ribonucleic acid, stories shared in seasonal cycles, stories told over generations. Our world is built of stories, stories we embody every day. If we pause to look back far enough, we can see that to live is to enact a story, and to live together is to recognize how deeply all our stories are entangled.

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Jake Young, PhD, MFA, MPH is a senior policy analyst at the American Medical Association in Chicago, Illinois. Young earned a PhD in English at the University of Missouri, an MFA in creative writing at North Carolina State University, and an MPH in health policy at the University of Chicago, where he was also a fellow at the MacLean Center for Clinical Medical Ethics. His specializations include literary studies, foodways, bioethics, and public health policy.

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ART OF MEDICINE

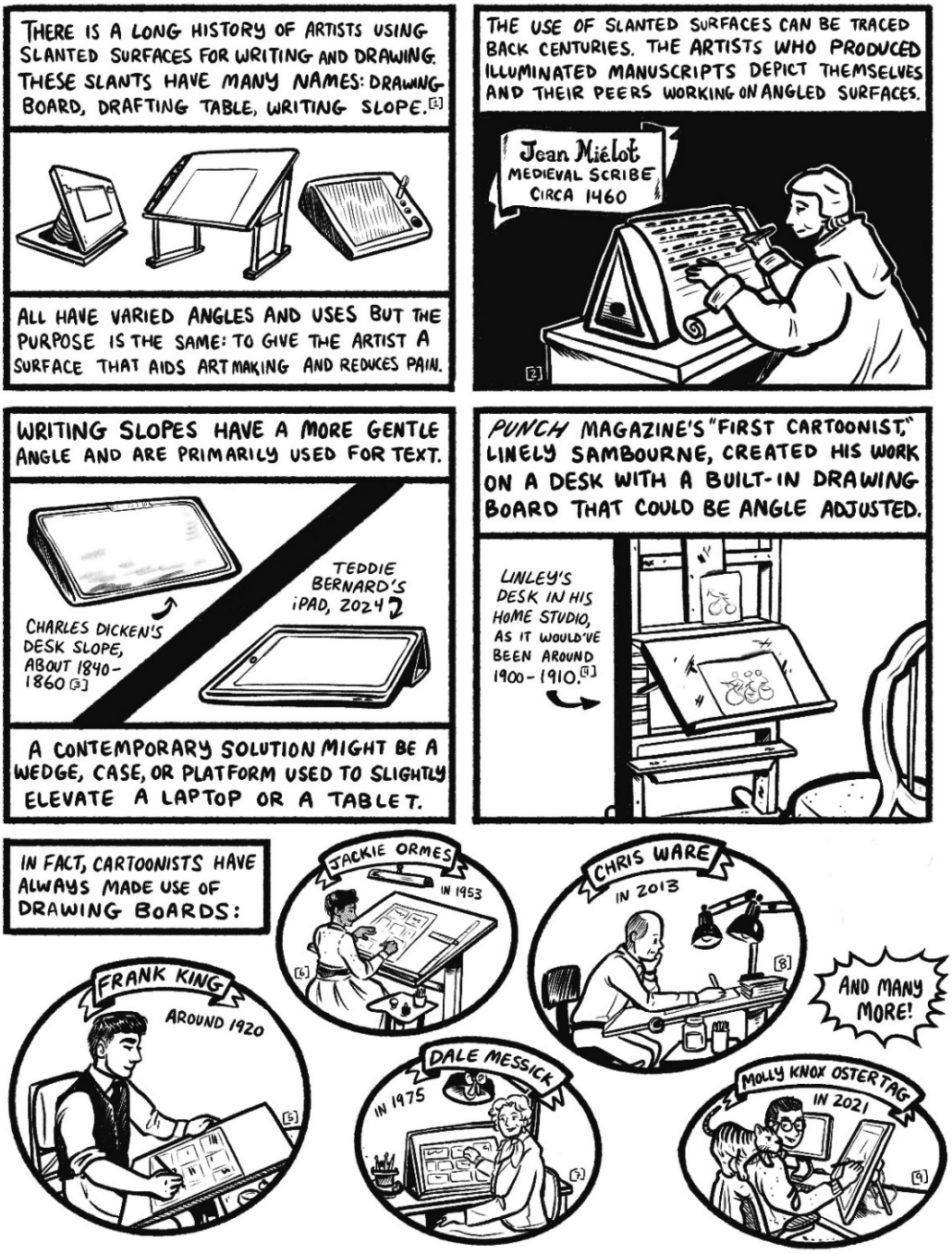
A Brief History of Healthier Comic Making

Teddie Bernard

Abstract

Angled work surfaces—drawing boards, drafting tables, and writing slopes—have been used by artists for centuries. These innovations have long helped comic artists preserve their bodies' capacity to create. This comic describes one artist's overcoming of repetitive strain and injury and traces a history of earlier comic artists' strivings to align their creative practices with their bodies' needs.

Figure. *A Slanted Surface—Health & History of Drawing Boards*


THERE IS A LONG HISTORY OF ARTISTS USING SLANTED SURFACES FOR WRITING AND DRAWING. THESE SLANTS HAVE MANY NAMES: DRAWING BOARD, DRAFTING TABLE, WRITING SLOPE.[1]
ALL HAVE VARIED ANGLES AND USES BUT THE PURPOSE IS THE SAME: TO GIVE THE ARTIST A SURFACE THAT AIDS ART MAKING AND REDUCES PAIN.
THE USE OF SLANTED SURFACES CAN BE TRACED BACK CENTURIES. THE ARTISTS WHO PRODUCED ILLUMINATED MANUSCRIPTS DEPICT THEMSELVES AND THEIR PEERS WORKING ON ANGLED SURFACES.
Jean Miélot
MEDIEVAL SCRIBE
CIRCA 1460
[2]
WRITING SLOPES HAVE A MORE GENTLE ANGLE AND ARE PRIMARILY USED FOR TEXT.
CHARLES DICKEN'S DESK SLOPE, ABOUT 1840–1860[3]
TEDDIE BERNARD'S iPAD, 2024
A CONTEMPORARY SOLUTION MIGHT BE A WEDGE, CASE, OR PLATFORM USED TO SLIGHTLY ELEVATE A LAPTOP OR A TABLET.
PUNCH MAGAZINE'S "FIRST CARTOONIST," LINELY SAMBOURNE, CREATED HIS WORK ON A DESK WITH A BUILT-IN DRAWING BOARD THAT COULD BE ANGLE ADJUSTED.
LINLEY'S DESK IN HIS HOME STUDIO, AS IT WOULD'VE BEEN AROUND 1900–1910.[4]
IN FACT, CARTOONISTS HAVE ALWAYS MADE USE OF DRAWING BOARDS:
JACKIE ORMES
IN 1953
[6]
CHRIS WARE
IN 2013
[8]
AND MANY MORE!
FRANK KING
AROUND 1920
[5]
DALE MESSICK
IN 1975
[7]
MOLLY KNOX OSTERTAG
IN 2021
[9]


WHAT MAKES THESE SLANTED SURFACES GOOD FOR ARTISTS? BY CHANGING THE ANGLE OF THEIR WORK SURFACE...
... THE ARTIST CAN IMPROVE POSTURE...
... RELIEVING PAIN ACROSS THE BODY.
AFTER ALL, THE WHOLE BODY IS CONNECTED.
IN MY CASE, ALTHOUGH MY RSI HURTS MY WRIST MOST, THAT PAIN IS TRIGGERED BY TENSION NEAR MY ELBOW OR SHOULDER.
HEALTH IN ART IS NOT JUST TELLING PEOPLE TO HAVE "GOOD POSTURE" BUT ALSO CREATING SPACES WHERE FULL-BODY HEALTH CAN FLOURISH.
STRETCHING & YOGA for Artists
ONE SIZE WON'T FIT ALL, BUT ARTISTS HAVE HISTORICALLY FOUND WAYS TO MITIGATE PAIN THAT WE CAN STILL LEARN FROM. WHAT NEW SOLUTIONS WILL WE DEVELOP OURSELVES?
I USE A STANDING DESK!
I HAVE A BIG GRIP FOR MY PENS!
I USE A SLANT FOR MY TABLET.
SO IF YOU'RE FEELING LIKE THIS...
SEEK OUT WAYS TO CHANGE YOUR PRACTICE AND SPACE TO ACCOMODATE WHAT YOU LOVE TO DO!

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Media

Digital in Procreate.

Teddie Bernard graduated from the School of the Art Institute of Chicago with a bachelor's degree in fine arts in 2023. Their editorial comics and graphic journalism have been recognized by the Society for Professional Journalists (Mark of Excellence, 2023), the College Media Association (2023, 2022, 2021), the Illinois College Press Association (2024), and the Associated Collegiate Press (2021).

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ART OF MEDICINE

Muscle Memory as Embodied Record Keeping

Jessica Delli Carpini

Abstract

Neon bending is arduous, requiring long-term cultivation of strong technical skill to express creative detail. This article describes how a neon crafter cuts glass tubing, heats it over an open flame, and bends it into right angles. Getting cut with glass shards, burned, or suffering repetitive stress injuries are all risks an artist takes to embody over time the skills of neon bending.

Neon Bending as Craft

Neon bending is a craft dating back to the early 1900s, when it was primarily used in storefront signs and advertising. By the 1960s, the practice had declined as signs made with light-emitting diodes became more widely available, offering cheaper, less craft-intensive alternatives to using illuminated neon.[1] Skill in neon bending became rare and is regarded today as a niche craft among artists captivated by its potential as an artistic medium.

Neon bending is difficult and can take years to master. Long glass tubes are slowly heated over an open flame until they become soft enough to angle. One end of a glass tube is plugged with a cork while the other is connected to a hose, into which the crafter must blow to prevent the glass tube from collapsing in on itself. This heating and bending process is repeated until the tube is shaped; finishing requires attaching electrodes to the glass tube's ends, filling the tube with a noble gas (eg, neon, argon, krypton, xenon), and then finally connecting it to a power source to create a glowing spectacle.

Muscle Memory

When learning this craft, I discovered that the material is unforgiving, the process is physically taxing, and it can take hours to create what looks like a few simple lines and angles. I would often leave the studio with a couple of new burns, covered in glass shards, and sweating from the heat generated by open flames. Neon bending is an intimate process between artist and material and requires patience and attention to detail. I was taught to bend neon by executing repeated movements. I learned 2 or 3 basic bend techniques and was assigned to practice each 50 times, or until I could successfully recreate each bend with confidence. My practice of this craft resulted in a lot of broken glass and, finally, in muscle memory, as each movement over time became

more natural and almost meditative. Muscle memory is the foundation of neon creations: precision is achieved by building muscle memory, which is a product of practice and repetition.

40.20

40.20 is a 3-dimensional light sculpture composed of 60 right-angle bends in 10 glass tubes filled with krypton gas. Despite its geometric rigidity, this work expresses my body's tactile memory. Indeed, the title *40.20* acknowledges and documents my experiences of cultivating muscle memory. At first glance, a viewer might see only simple, lit squares; a closer look reveals the squares' composition from 40 two-dimensional and 20 three-dimensional right-angle bends in 10 glass tubes.

40.20 features the spectacle of noble gases as captivating media that reliably attracts a viewer's attention to light and space, since the glass is clear and invites a viewer to move around the work and experience its effects from different perspectives. When observing the sculpture from the front, a viewer can see the row of 10 glowing squares. When observing the sculpture from the side, a viewer can become immersed in an optical illusion when the squares align to the point of concentricity.

Figure 1. *40.20*, front view

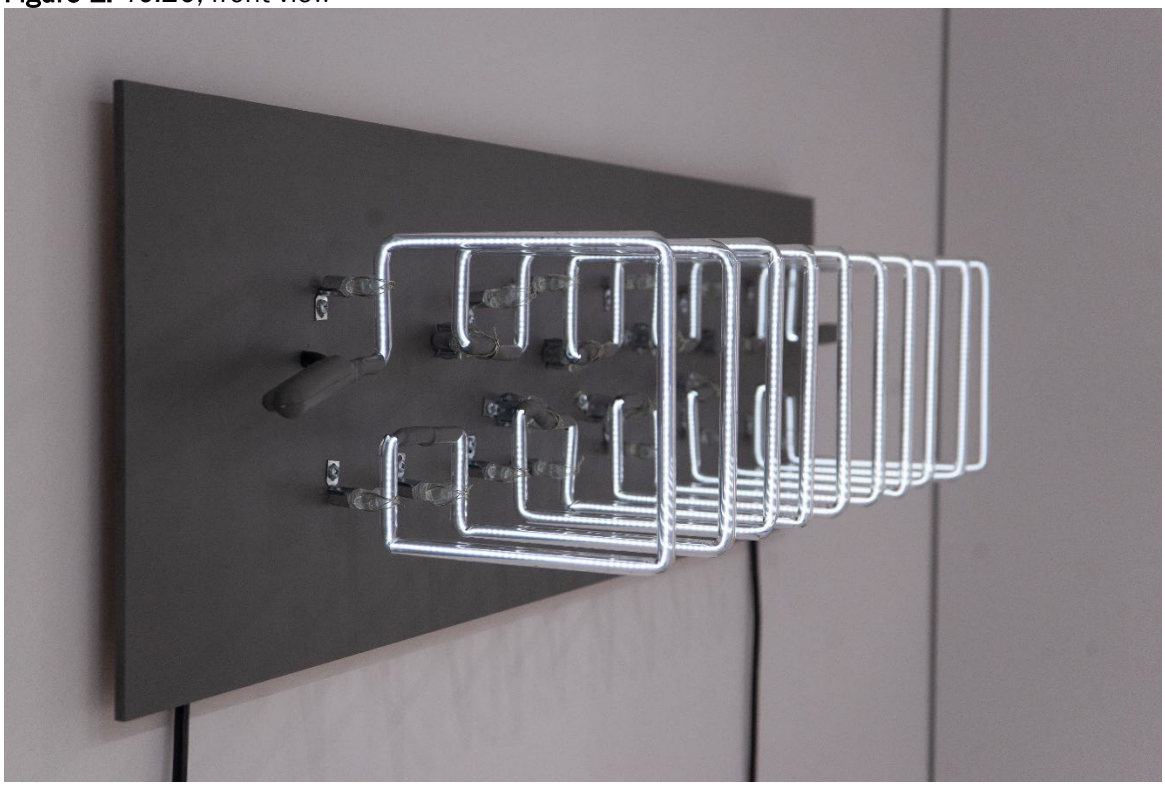

Photo by Sherman White.

Media

Ten-millimeter clear glass tubes filled with krypton, mounted on painted wood panel. Full-color digital photograph.

Caption
This photograph of *40.20* shows the 10 glowing, white concentric glass squares with a gray background.

Video. *40.20*, front view, power on and off

Video by Jessica Delli Carpini.
Click here to view the video.

Figure 2. *40.20*, close-up, front view

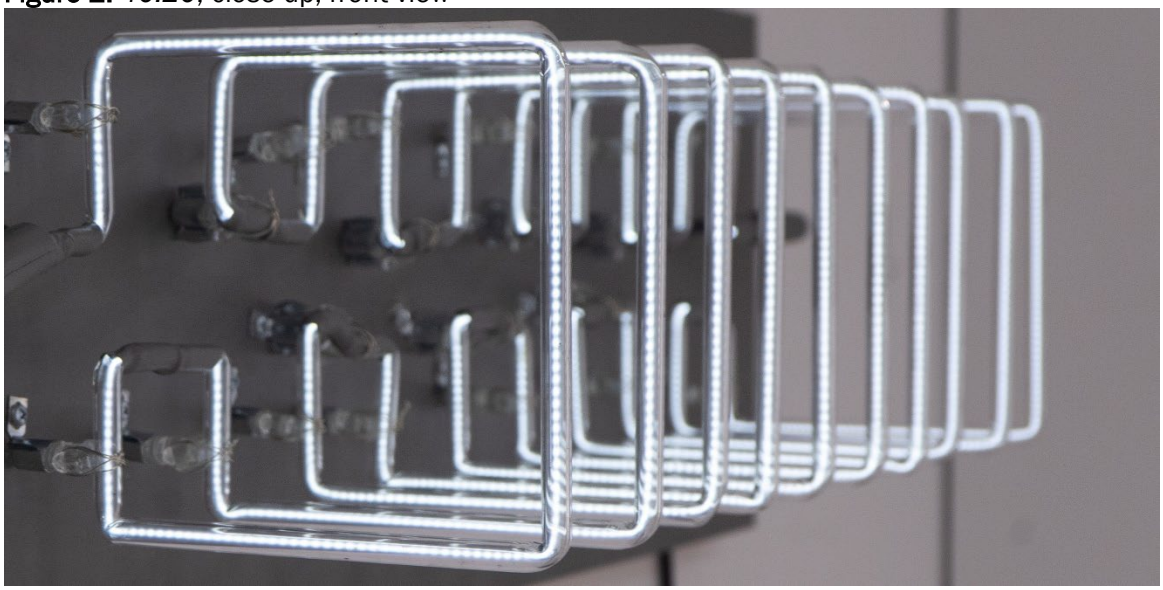

Photo by Sherman White.

Media
Ten-millimeter clear tubes filled with krypton, mounted on painted wood panel. Full-color digital photograph.

Caption
This photograph of *40.20* shows 10 glowing, white concentric glass squares mounted on a gray wooden panel on a wall.

Figure 3. *40.20*, close-up, side view

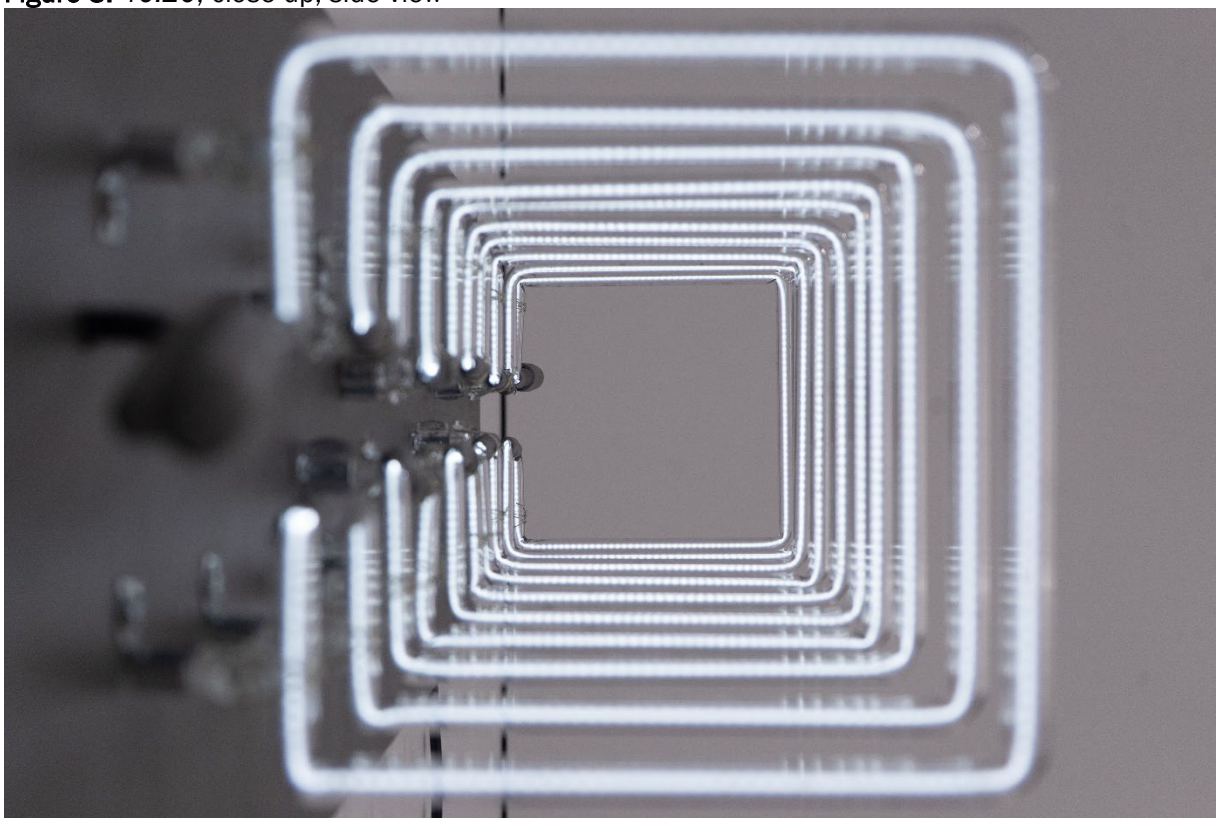

Photo by Sherman White.

Media
Ten-millimeter clear tubes filled with krypton, mounted on painted wood panel. Full-color digital photograph.

Caption
This close-up of *40.20* shows a side view of 10 glowing, white concentric glass squares with a gray background.

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Jessica Delli Carpini is an interdisciplinary artist currently based in Chicago, Illinois. In 2022, she received a bachelor of fine arts degree from the School of the Art Institute of Chicago, with an emphasis in sculpture and visual communication. Much of her work explores repetition of the body and its relationship to space through media, including neon bending and woodworking.

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ART OF MEDICINE

Repair and Transformation

Delaina Doshi, MFA and Neha Sheng, MD

Abstract
This work considers themes of repair and transformation in vascular surgical technique and expresses the artists' interests in textiles, ceramics, and embodiment.

Figure. *Mending*, 2024

Media
Shards of decorative ceramic plates, gold wire, 10.5" x 8.5".

Caption
Mending is made from decorative plate fragments. In vascular surgery, attempts to restore function often use part of a vein from within a patient's own body. In *Mending,* broken portrait fragments are sewn together with gold wire, suggesting this kind of autograft. Vascular surgeons blend technical expertise with their own creative skill to forge solutions uniquely suited to each patient's body.

Delaina Doshi, MFA is a Chicago-based interdisciplinary artist who reimagines textiles through a fusion of tesserae, assemblage, and archival techniques. She explores narratives of personal heritage and material culture inspired by her rural Midwestern upbringing and experiences of being married to a first-generation Indian American. Doshi earned her MFA from the School of the Art Institute of Chicago in 2023.

Neha Sheng, MD is a vascular surgeon at John H. Stroger, Jr Hospital of Cook County in Chicago, Illinois. She completed both her medical education and her residency at Rush University Medical Center, followed by a fellowship at Loma Linda University Medical Center.

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ART OF MEDICINE

Self-Portraiture, Embodiment, and Adaptive Creation

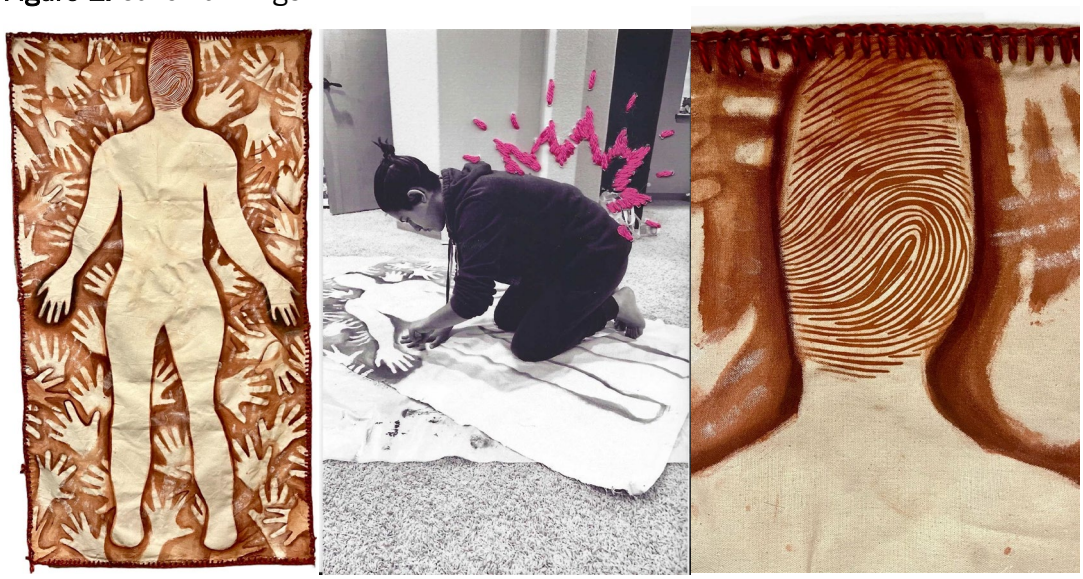
Julia O'Brien

Abstract

Time Capsule is a collection of multimedia paintings and sculptures that visually consider significant contributors to collective and individual health events and experiences. This collection compares body parts to individual items found within an imaginary time capsule, with the body acting as a vessel for reflections on society.

Anatomical structures inform our experiences of health, our embodiment, and our physical versatility over time. *Time Capsule*—a collection of multimedia paintings and sculptures—is intended to capture how our bodies change over time, investigate roles our environments play in the pathologies we suffer, and reflect on the question: *What is the nature and scope of responsibility we should attribute to ourselves, our families, and our societies for the health effects we endure and impose upon generations throughout time?*

Figure 1. *Cave Paintings*



Media

Red ochre pigment, charcoal, white chalk, embroidery, and photograph on 5' x 3' canvas.

Caption

The *Cave Painting*s tryptic includes a negative self-portrait inspired by early paintings in modern-day France and Argentina.[1] I cut canvas to my exact height and approximate width, and asked my sister to outline my body, creating a silhouette. I used water, charcoal, and natural red ochre pigment, which would have been used during the Stone Age, to reproduce possible experiences of earlier humans. My right thumbprint, captured using tape and graphite, is enlarged as my facial identity. A unique aspect of my biography can be inferred from handprints in white chalk, which show grips I once wore on my hands as a gymnast. I also included a photo of myself working, which exacerbated my back pain; I signified pain flares in pink in the central image.

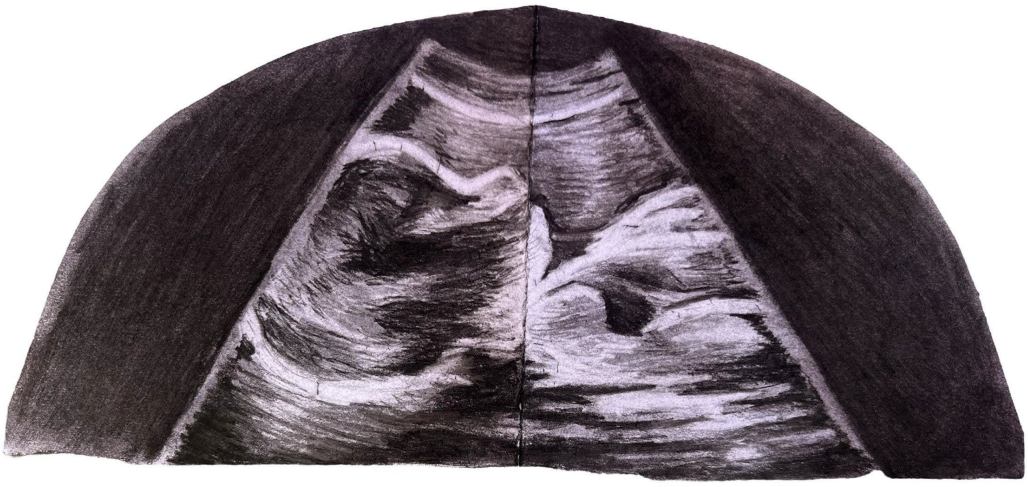
Figure 2. *My Dad's Genes*

Media
White fabric paint on worn jeans.

Caption
My Dad's Genes depicts hajichi (ハジチ) on an old pair of his jeans. Hajichi is the traditional art of tattooing women's hands exclusively by women artists of the Ryukan Islands (琉球). My great-great-grandmother had these tattoos before tattooing was banned when mainland Japan colonized Okinawa.

Across cultures, body arts—including tattoos, dance, lip stretching, and hair protection, for example—have cultural and ethical importance. We decorate our bodies as expressions of self, culture, self-care, and survival. As a mixed-race person, my relationship to ethnicity is key to my experiences of embodiment, cultural preservation, and self-preservation.

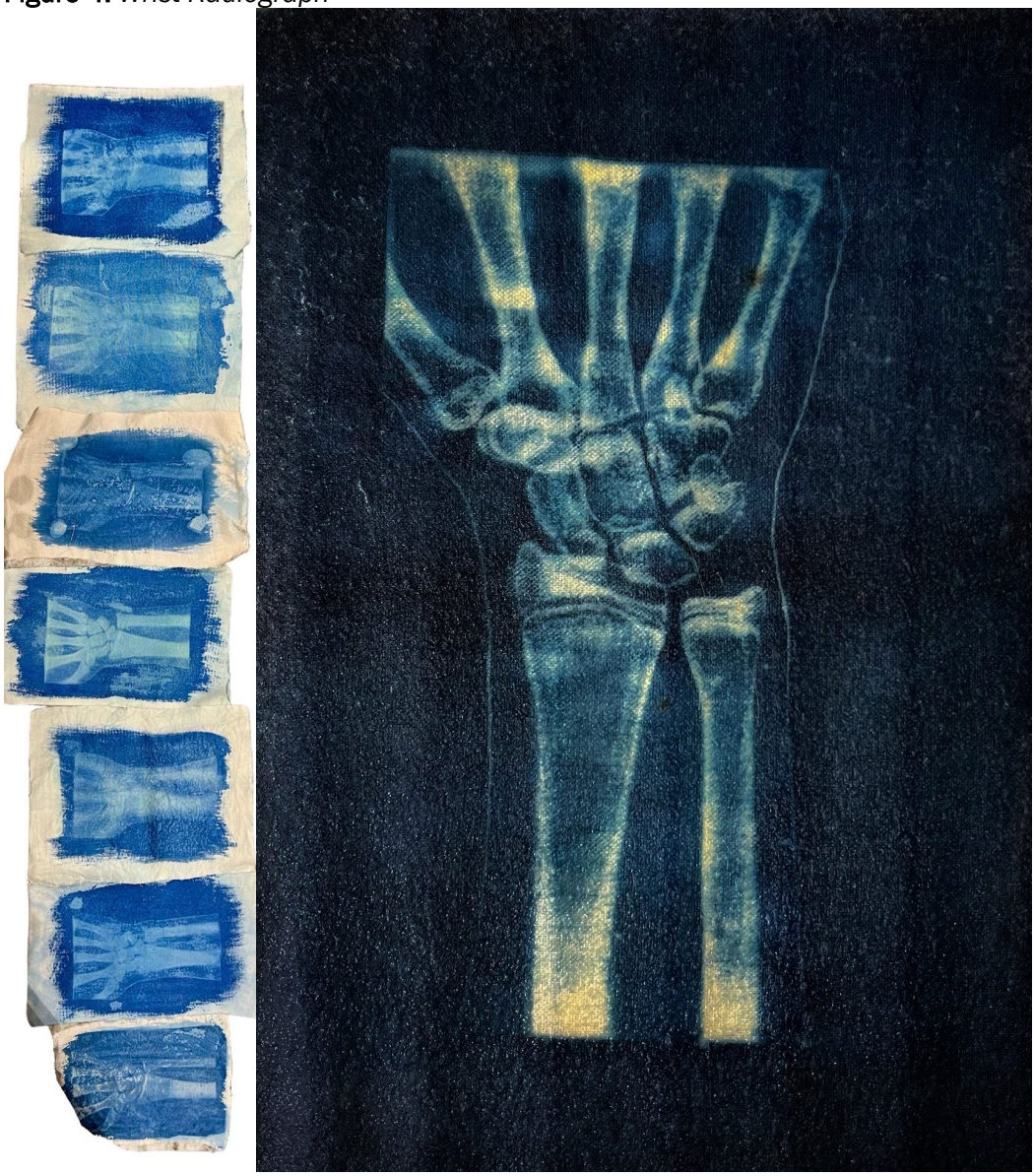
Figure 3. *Early Self-Portrait*



Media
Charcoal and graphite on paper.

Caption
I found a sonogram, taken 39 days before I was born, in one of my mother's photo albums. I recreated this image using charcoal and graphite on paper. Such technological images can complicate one's sense of "self" and challenge our conceptions of what constitutes a "self-portrait."

Figure 4. *Wrist Radiograph*



Media
Cyanotype on fabric.

Caption
Distal radial epiphysis is more commonly referred to as “gymnast’s wrist” because it is found in nearly 40% of gymnasts.[2] This solar print is a re-creation of radiographs of my own wrist from 2015. Radiograph images are produced by transmitting ionized radiation (X-rays) through body parts that absorb different amounts of the X-rays, depending on tissues’ densities. Solar prints, or cyanotypes, are similarly made using ultraviolet (UV) light. (Chemicals present in cyanotypes are light sensitive, turning cyan blue when hit with UV rays. Images are created by blocking UV light from hitting light-sensitive material.) I created an inverse copy of my original radiographs in black ink on

transparent acetate to control light exposure on cyanotype-coated fabric. The iterative quality of the printing process parallels the repetitive nature of gymnasts' stress injuries. While many members of the public can't relate to gymnastics injuries, the pain of repeating specific movements as part of one's work or craft is known to many.

Figure 5. *Chronic Compartment Syndrome in Ink*

Media
Black ink on transparent acetate.

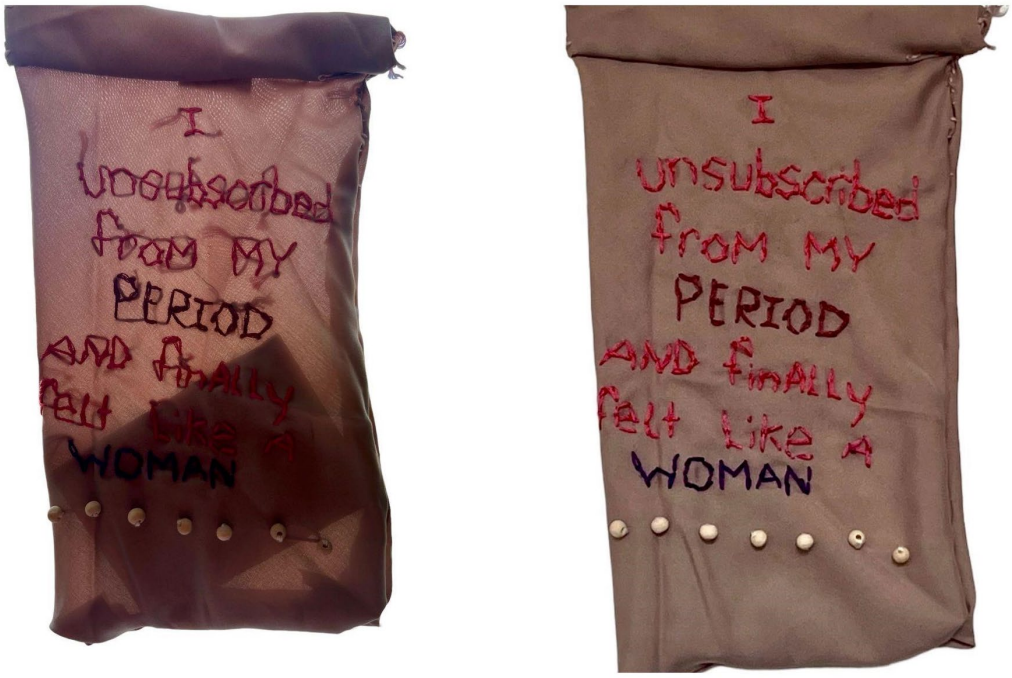
Caption
Pain in my wrists from distal radial epiphysis led to chronic compartment syndrome in my forearms, threatening to compromise my capacity to draw. As an artist at heart, I stopped gymnastics. Shading and detail work became painful to do. Even for this project, I had to take multiple breaks from stippling the X-rays due to pain in my arms, so I started experimenting with softer media and digital art. I eventually transitioned to forging creative detail in embroidery.

Figure 6. *Cross Section*

Media
Embroidery with beads on muslin.

Caption
This piece reveals musculature in a cross section of the forearm, with beads in place of the nerves and blood vessels that are harmed in compartment syndrome. Embroidery work allows me to indulge in detail work without causing pain in my arms, so I've begun working in more sculptural forms.

Figure 7. *Unsubscribe, Please*



Media
Embroidery, 7 beads, found object (old birth control pill container) in sewn brown fabric.

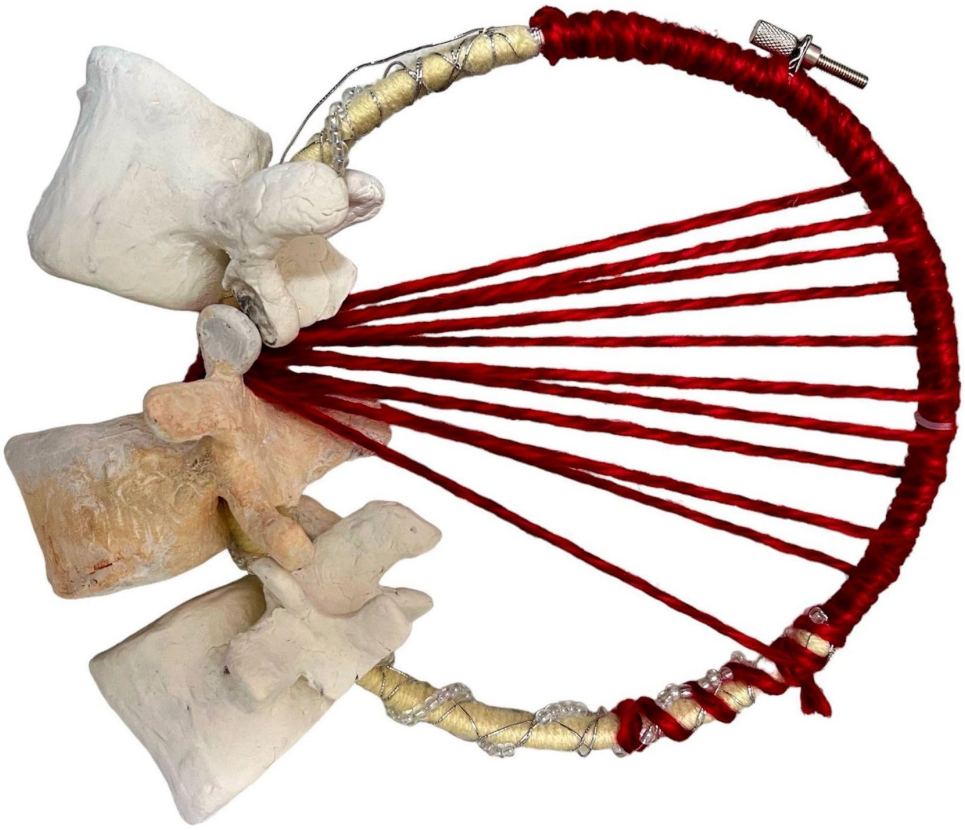
Caption
In many cases, conditions like polycystic ovarian syndrome, endometriosis, uterine fibroids, and premenstrual dysphoric disorder can be left undiagnosed and untreated for years.[3] I draw here on the idea that many women hate menstruation; menstrual pain has been normalized such that it can be difficult for many young women to recognize when their pain indicates a pathology that needs clinical attention. My endometriosis, for example, was so painful that I desperately wanted to remove my reproductive organs each month, and dysphoric symptoms generated the recurrence of suicidal thoughts with each menstrual cycle. This artwork, mimicking paper pharmacy bags, expresses how reproductive disorders shaped my own relationship to gender. It took 3 versions of contraceptive medications before I found relief from pain. It's frustrating to explore different approaches to women's reproductive health care because it takes 6 weeks before you can tell if the new method is working or not, and our bodies continue to change over time. Women suffer a disadvantage in health care due to a long history of clinical misogyny that prioritizes male bodies in research and care,[4] leading some women to distrust that their pain is taken as seriously as men's pain.[5]

Figure 8. *Floor Work*

Media
Embroidery on fabric.

Caption
Learning pelvic floor therapy techniques has been some of the hardest therapeutic work I have ever done. The physical discomfort of releasing stored trauma was also emotionally exhausting. This embroidery replicates clinical diagrams[6] on the walls of the room where I'm treated. Thread directionality and shape correspond to deeper muscle tissues of the pelvic floor. Most people rarely, if ever, learn about their pelvic floor, which is critical for core stability, sexual satisfaction, and healthy continence.[7] Again, a lack of education regarding our own bodies can lead to late diagnosis of pathologies.

Figure 9. *Vertebrae*



Media
Modeling clay and yarn on embroidery hoop.

Caption
I was about 12 years old when gymnastics brought on my back problems. I sculpted L3, L4, and L5 of my vertebrae[8] where the pain is centered. Yellow sections of the hoop follow where the spinal cord fits into the skeleton and holds the sculptures in a strained arch shape. Bodies, especially developing ones, struggle to hold contradictions gracefully.

Figure 10. *Culprit Muscles*

Media
Embroidery on fabric.

Caption
I was extremely flexible as a child, and having to develop strength in loose muscles caused a discoordination in my body that requires intensive physical therapy to unlearn. I embroidered culprit muscles that require retraining and dry needling.

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Julia O'Brien is a comic artist and illustrator who explores identity as a matrix of biology and experience. She enjoys learning new mediums and incorporating her history as a gymnast to tell authentic and thoughtful stories. She was an Art of Medicine intern with the *AMA Journal of Ethics* in 2022 in a joint program with the School of the Art Institute of Chicago, from which she graduated in 2023.

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ART OF MEDICINE

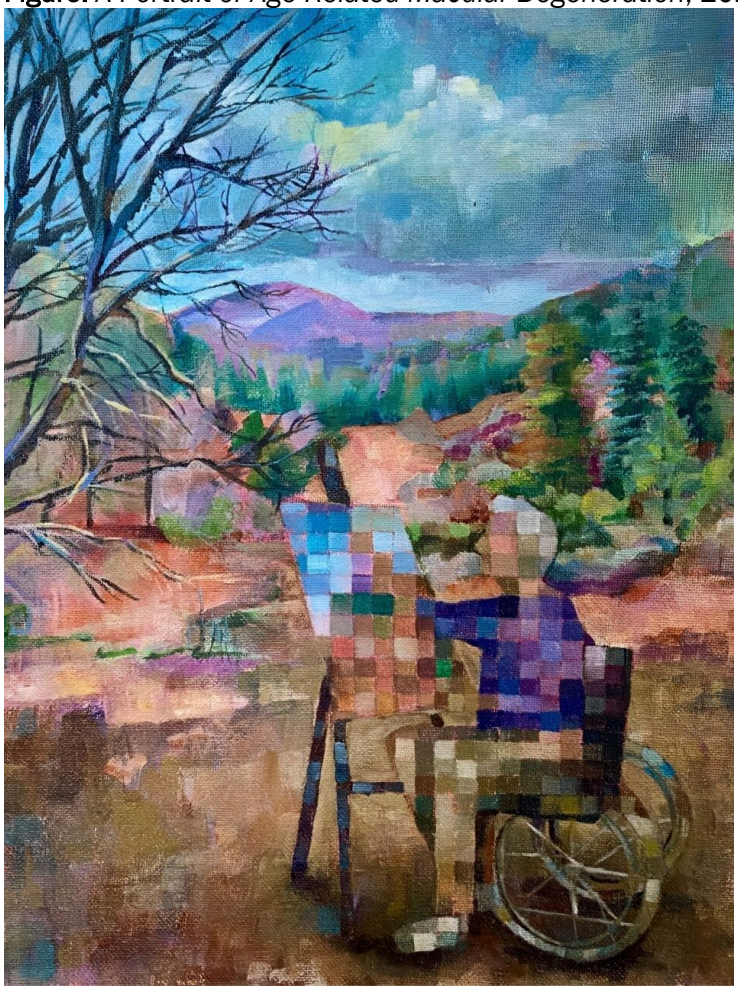
Painting Through Macular Degeneration

Michael Zitser

Abstract

This work considers adaptations required in an artist's creative processes to maintain artistic expression despite bodily and well-being changes over time.

Figure. *A Portrait of Age-Related Macular Degeneration*, 2024



Media
Acrylic paint on canvas, 9" x 12".

Caption
An artist in a wheelchair paints a mountain landscape *en plein air* (in the open air). The pixelation effect, which moves inward from the canvas margins toward the central figure, is represented as a metaphorical artifact of vision loss from age-related macular degeneration (AMD). Depression in patients with AMD is well studied,[1] and one might expect that adaptation to vision loss can be fraught in specifically poignant ways for artists whose creative processes rely on their embodiment in the field and their experiences and perceptions of natural light, which landscape painting *en plein air* demands.

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Michael Zitser graduated from California State University, Los Angeles with a bachelor of science degree in biochemistry and a minor in art. He has interests in biomedical research and the intersections of art and science.

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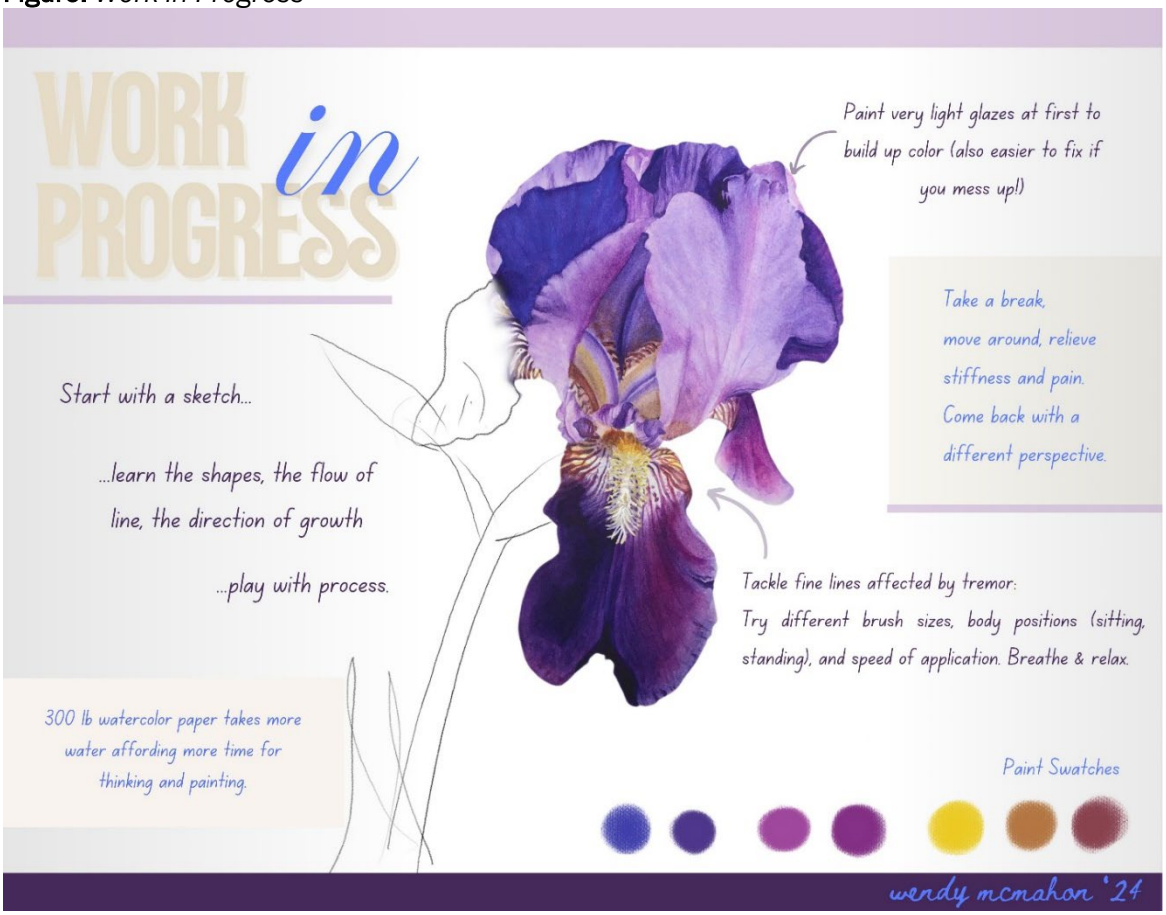
ART OF MEDICINE

Watercolor With Tremor

Wendy McMahon

Abstract
This study page of a bearded iris documents the artist's process of learning watercolor painting while navigating chronic fatigue, tremor, and pain.

Figure. *Work in Progress*



Media
Watercolor on 300 lb hot pressed paper; line drawing and notes added in Procreate.

Caption
This study page documents parts of my creative process. Specific painting materials and techniques offer opportunities for embodied adaptation, especially when constraints are also viewed as possibilities. For example, if occasional tremor interrupts my painting, I have learned to use those times to experiment with different techniques: using my brush at a different speed, working in lighter paint layers, adjusting my body in relation to the painting surface. Real-time visual information while painting cues my next adjustment: my embodiment generates and is generated by my aesthetic goals. This iterative art practice also informs and transforms my everyday life and draws me toward an artful practice of living well with chronic illness.

Wendy McMahon is a doctoral student in the Music, Health, Society programme at Nordoff and Robbins in London in the United Kingdom. Her research focuses on adaptive strategies developed by professional musicians with chronic illness or injury that enable them to continue making music professionally. Wendy's artistic practice includes music, drawing, and painting. Her art making is a work in progress, cultivated through experiences of living with chronic illness. She values realism and the beauty in everyday things.

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ART OF MEDICINE

Embodied Experiences of Implants

Holland Houdek, MFA

Abstract

Hyperbolic (Implants Series III) examines through 40 sculptures, 6 of which are featured in this article, how devices implanted become embodied. These sculptures are inspired by real prostheses and surgical implantation procedures. By exaggerating features of these devices, patients' experiences of device-based clinical interventions are creatively imagined. Viewers and readers are invited to consider how implantation and prosthetic technologies simultaneously shape and are shaped by human mortality and morality.

Ethical Complexity of Implants

Implants are politicized, contested, and profound objects, often of immeasurable material, symbolic, and personal value. They have power to heal and restore and to give and prolong life, and their design and production yields high profit margins for large medical device companies.[1] The United States is the largest international exporter of implantable devices,[2] but we would do well to ask whether, when, and how implantation into the bodies of poorer global citizens can be complicated—if not rendered impossible—by bureaucracy, black market entanglement, high tariffs, and lack of appropriate expertise.[3,4,5,6,7] For many reasons, waste from device "expiration" can be a problem in some countries to which devices are exported,[8] and, regardless of location, some devices are recalled post implantation due to adverse reactions.[9]

Hyperbolic (Implants Series III)

This series has a total of 40 sculptures, 6 of which are featured here. Each sculpture is designed to exaggerate features of implantable devices, some of which are more common than others in the Global North and Global West (eg, breast implants, shoulder prostheses, hip prostheses, heart valves, penile implants, spinal disk replacements). The sculptures and their materials suggest suitability for placement in anatomies that don't really exist; readers and viewers are invited to consider an imagined implantee's place in, say, the history of aesthetics or the history of using metallurgy to adorn or defend one's body.

Figure 1. *Nelumbo Mastoplasty (Lotus Breast Implant)*, 2017

Media
Hand-fabricated copper, pierced; silicone breast implant; Swarovski crystals (621); bead-blasted patina, 7.75″ x 7.75″ x 2.5″.

Caption
Nelumbo Mastoplasty reimagines a breast implant through the symbolic and ornamental lens of a breast plate. Layered concentric discs, adorned with delicate cutouts and patterns, form a floral structure reminiscent of a lotus in bloom. At the center, a silicone breast implant's translucent yellow mesh evokes the inner workings of implantable medical devices and suggests their transformative, healing promise. The work's combination of organic and technological motifs draws attention to the tension between artificial enhancement and natural form.

Figure 2. *Nelumbo Mastoplasty (Lotus Breast Implant)*, detail image, 2017

Media
Hand-fabricated copper, pierced; silicone breast implant; Swarovski crystals (621); bead-blasted patina, 7.75″ x 7.75″ x 2.5″.

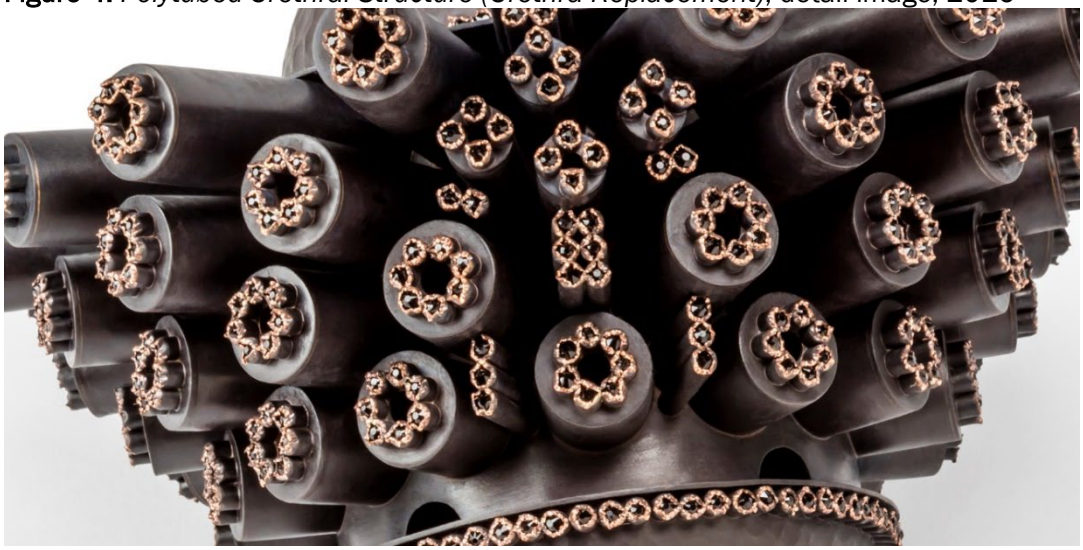
Caption
This close-up image of the above magnifies details, such as piercings, stone settings, and lotus-like patterns that surround and glorify the integrated silicone yellow mesh.

Figure 3. *Polytubed Urethral Structure (Urethra Replacement)*, 2016

Media
Hand-fabricated copper, raised; urethra implant; Swarovski crystals (583); bead-blasted patina. 5.75″ x 15″ x 7″.

Caption
Hammered metal, crowned with a dense arrangement of tube-like protrusions adorned with black Swarovski crystals, evokes a hybrid of organic and mechanical urethral anatomy. This sculpture invites viewers and readers to reflect on the intricacy of bodily systems and parts that render us vulnerable when in need of clinical attention or repair.

Figure 4. *Polytubed Urethral Structure (Urethra Replacement)*, detail image, 2016



Media
Hand-fabricated copper, raised; urethra implant; Swarovski crystals (583); bead-blasted patina. 5.75″ x 15″ x 7″.

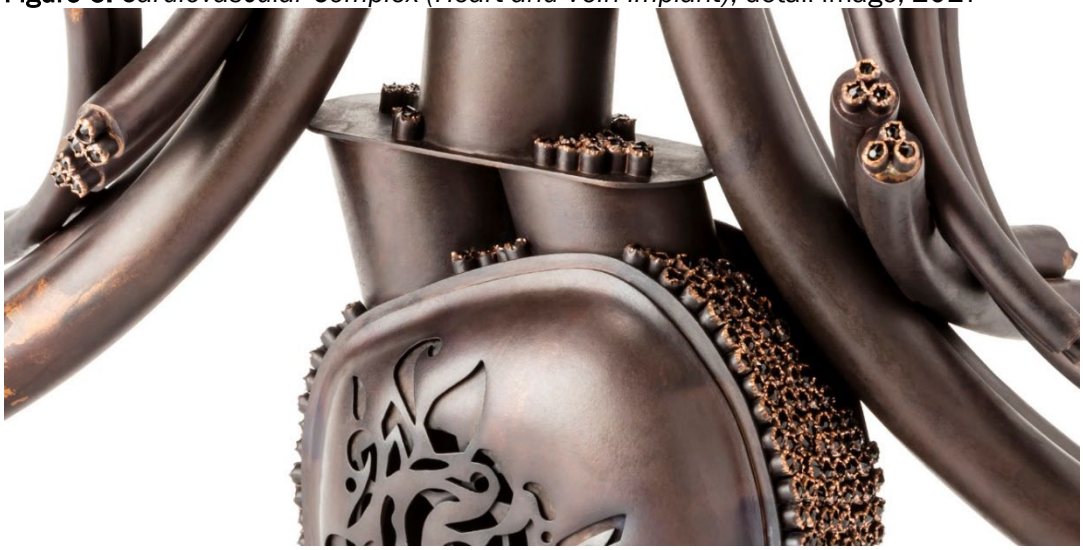
Caption
Detailed image of protruding tube-like structures and stone settings.

Figure 5. *Cardiovascular Complex (Heart and Vein Implant)*, 2017

Media
Hand-fabricated copper, pierced; Swarovski crystals (475); bead-blasted patina, 9.75″ x 8.5″ x 4.75″.

Caption
This patinaed copper sculpture reimagines a heart implant. Its central form evokes a stylized heart, adorned with lace-like intricacies. Extending from the heart are exaggerated, tubular structures that, despite their industrial aesthetic, resemble blood vessels and invite a viewer or reader to visualize a heart replacement elaborately bejeweled.

Figure 6. *Cardiovascular Complex (Heart and Vein Implant)*, detail image, 2017



Media

Hand-fabricated copper, pierced; Swarovski crystals (475); bead-blasted patina, 9.75″ x 8.5″ x 4.75″.

Caption

This detailed image of the above depicts vein-like structures extending from the rendered heart implant and covered in small stone settings.

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Holland Houdek, MFA is an associate professor and the art gallery director at Nazareth University in Rochester, New York. Her work focuses on medical implants, the body, and embodied experience; has been exhibited in top galleries, exhibitions, books, and publications; and has received several competitive awards. She holds an MFA from Syracuse University and a BFA from University of Wisconsin-Stout. Find more about her and a digital gallery of the other work in this and other series by visiting https://hollandhoudek.com/.

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ART OF MEDICINE

Perch and Peel in Illustrated Poems of Embodiment

Michaela Chan, MFA

Abstract

Trace monotype is a technique often useful to artists looking to combine drawing and printing, and it is physically demanding, requiring an artist to "perch" over glass and ink while marking paper. This series of 5 trace monotypes considers how a perching posture informs the writing and illustration of 5 poems about the shapes our bodies can take.

Trace Monotype Technique

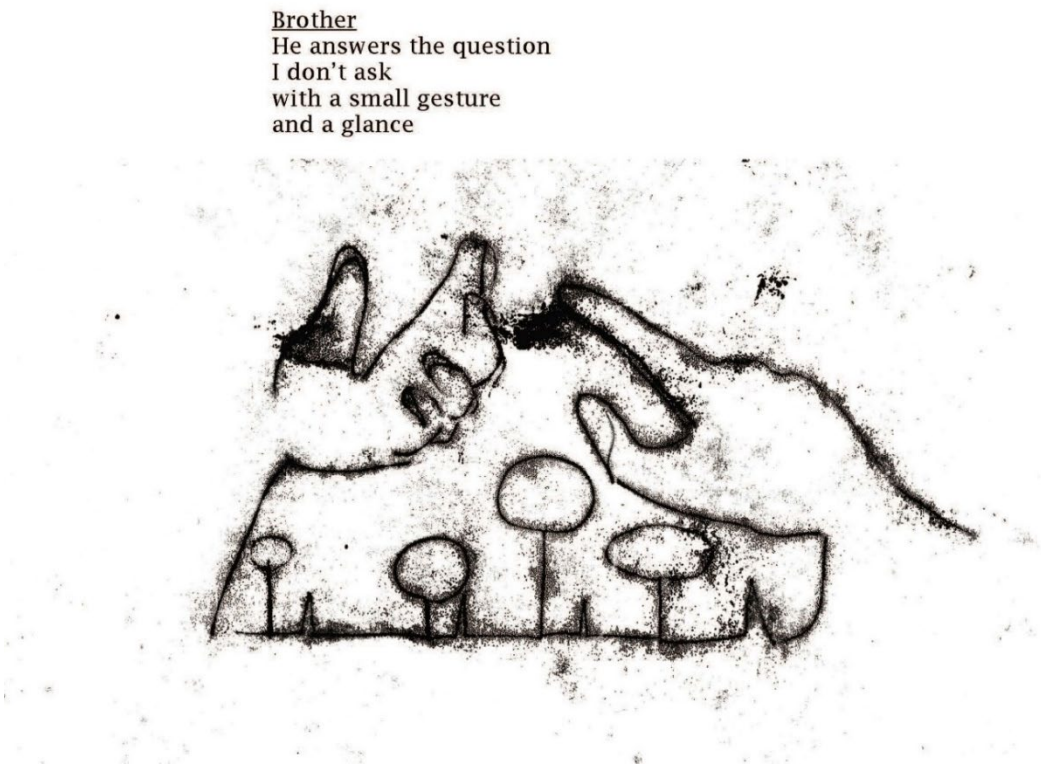
Perch. When making prints with a technique called *trace monotype*, an artist must use her body to position herself to lean into a "perch" above a thick application of ink on a glass plate. A piece of paper is then placed by the artist "right side" down onto the ink and the artist draws on the exposed, "wrong side" of the paper, applying pressure from a pen or other utensil to transfer ink to the "right side." Still perched—careful to avoid errant body contact with the medium and, thus, any errant transfer of ink—the artist makes her marks on the paper.

Peel. The artist is blind to the image she has created until this moment: having made her marks, she relinquishes control over the image created from glass, paper, ink, and the artist's perching stamina.

Illustrated Poems

Perch and peel demands of trace monotype printmaking parallel how our bodies can slip, throughout our lives, out of states of control and comfort and into states in which we lack control and feel varying degrees of discomfort. Moments when our bodies break, obsess, refuse to speak are unique experiences of embodiment cataloged and considered in this series of illustrated poems.

Figure 1. *Brother*



Media
Monotype.

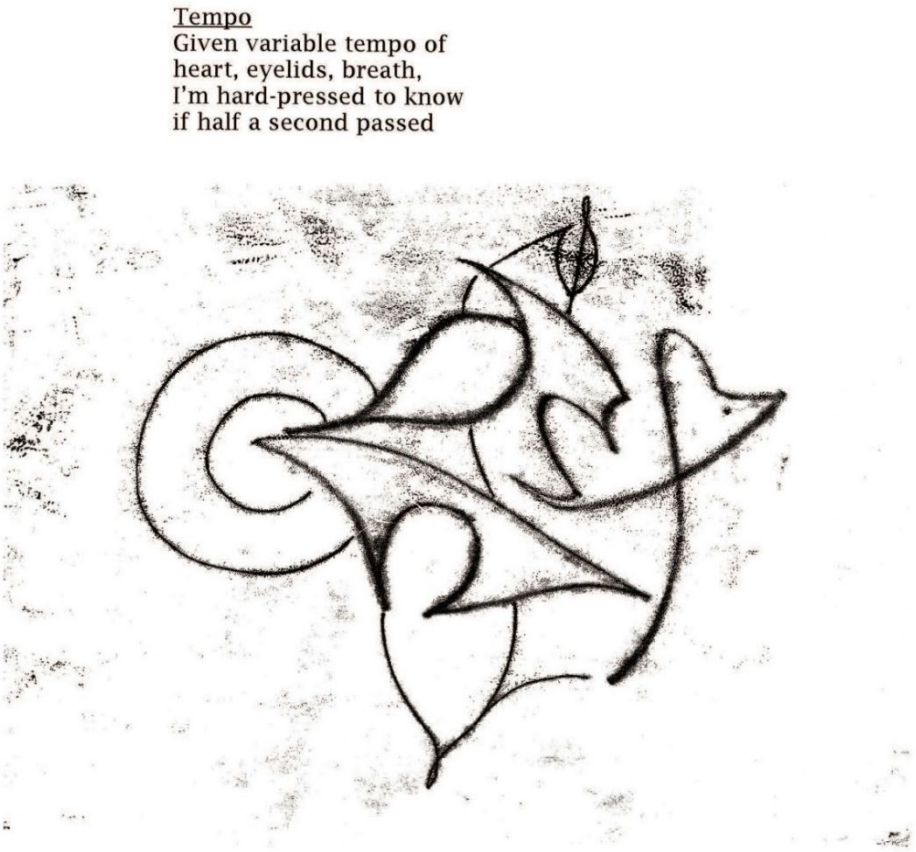
Caption
Two hands nearly meet or, perhaps, have just parted. The gesture suggests that these hands share a (perhaps fleeting) understanding: wordless, silent communication among siblings that might not, need not, should not, or cannot be spoken.

Figure 2. *Waltz*

Media
Monotype.

Caption
Proprioception, the sense of one's body position and movement, enables drawing and inspires writing. To draw figures without a live model, an artist might fold herself into a pose and feel how her limbs, torso, and head relate in space. When tuning into a rhythm of walking, the 4/4-time signature used commonly in Western music can be felt. Overlaying a waltz's 3/4-time signature onto footsteps requires conscious effort that, eventually, 4/4-time undermines and subsumes. A body's intimate patterns of being in the world are often not easily adjusted.

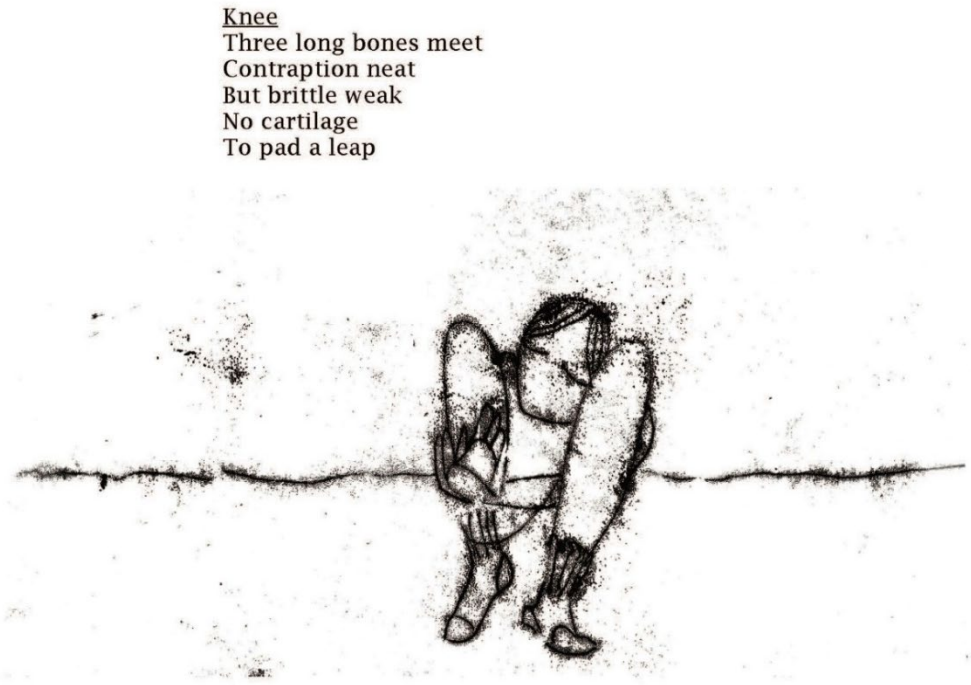
Figure 3. *Tempo*



Media
Monotype.

Caption
The poem and illustration observe the disappearance of time through simultaneous and distinct events in one's body: heartbeats, eyeblinks, inhalations, exhalations, swallows, fidgets, lip bites, knuckle cracks, and the arcane clockwork of memory provide cacophonous and changeable temporal experiences that have little to do with one's wristwatch. Such experiences of time might be felt more along the lines of that expressed in Robin Wall Kimmerer's chapter, "Witness to the Rain," in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*: "Water falls from these trees into the pool, each with its own rhythm.... Listening to rain, time disappears. If time is measured by the period between events, alder drip time is different from maple drip. This forest is textured with different kinds of time, as the surface of the pool is dimpled with different kinds of rain."[1]

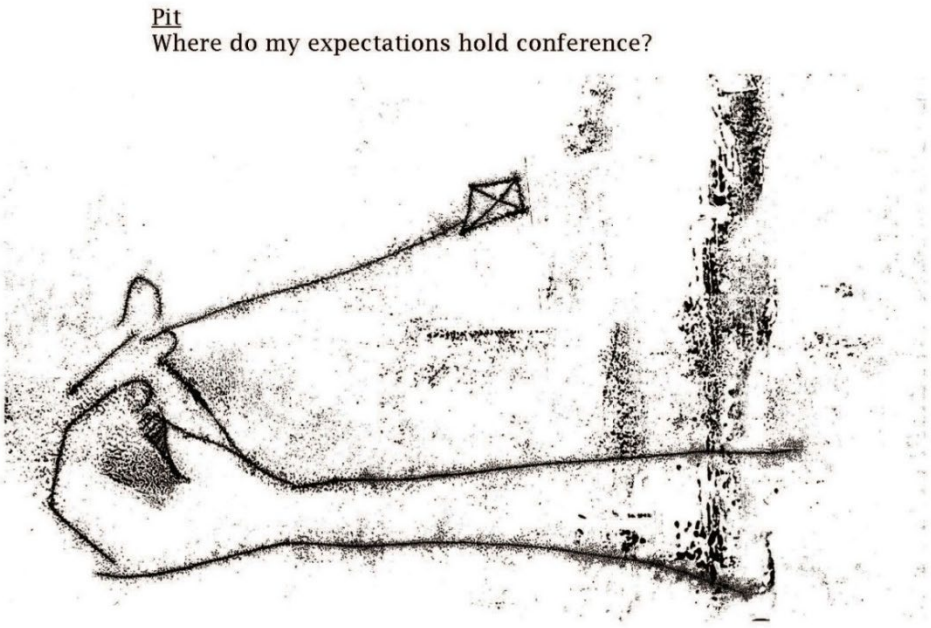
Figure 4. *Knee*



Media
Monotype.

Caption
Knees are complex and strong but also fragile joints that are vulnerable to overuse or excessive force. When a knee is compromised, one cannot bear one's own weight without assistance. This illustration considers a posture of cradling the diminishment to one's body and spirit wrought by injury and, perhaps, by regret about one's chosen or accidental movements.

Figure 5. *Pit*



Media
Monotype.

Caption
In moments of having had high expectations dashed, disappointment can be felt as an outsized weight in the proverbial "pit" of one's stomach. One does well to remember that the flight of a kite depends on the solidity and heft of its tether to the ground.

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Michaela Chan, MFA is a poet-cartoonist living and teaching in Rochester, New York. While a student at the School of the Art Institute of Chicago in Illinois, she was an early Art of Medicine intern at the *AMA Journal of Ethics*.

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ART OF MEDICINE

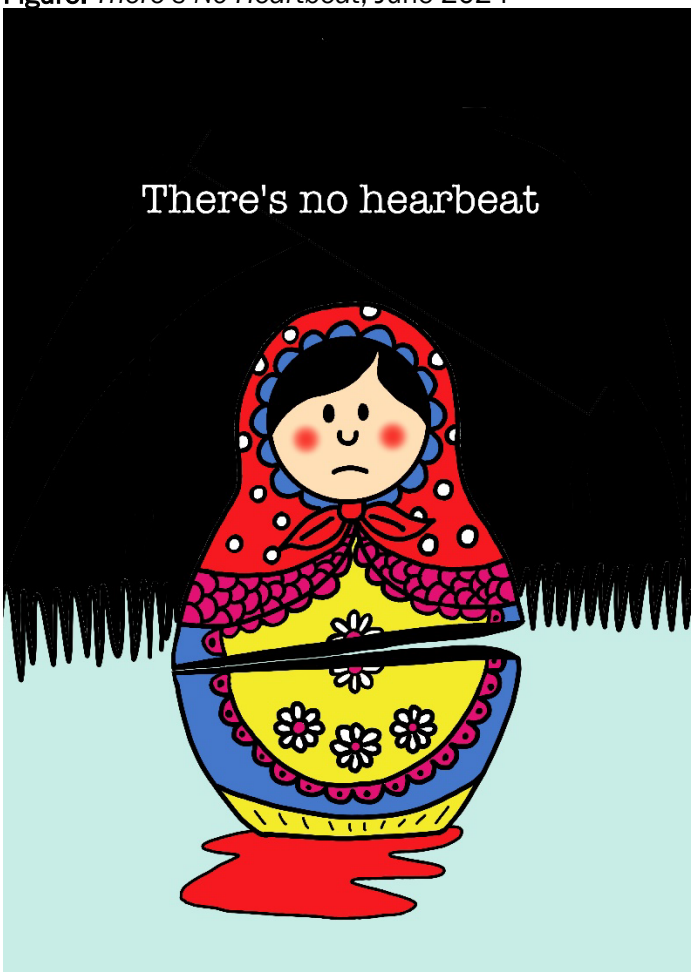
When Poor Practice and Poor Communication Make Grief Worse

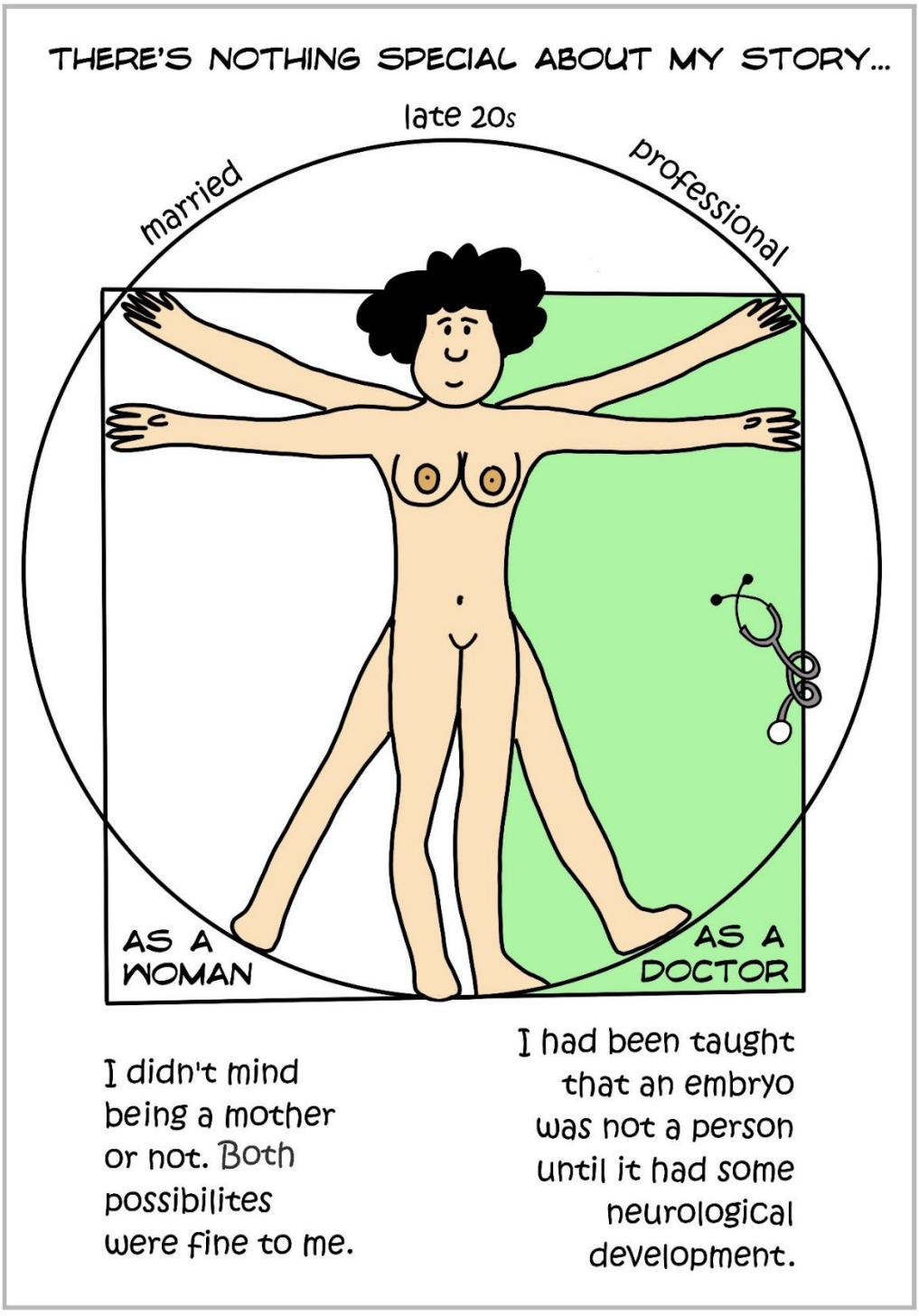
Mónica Lalanda, MD, MSc

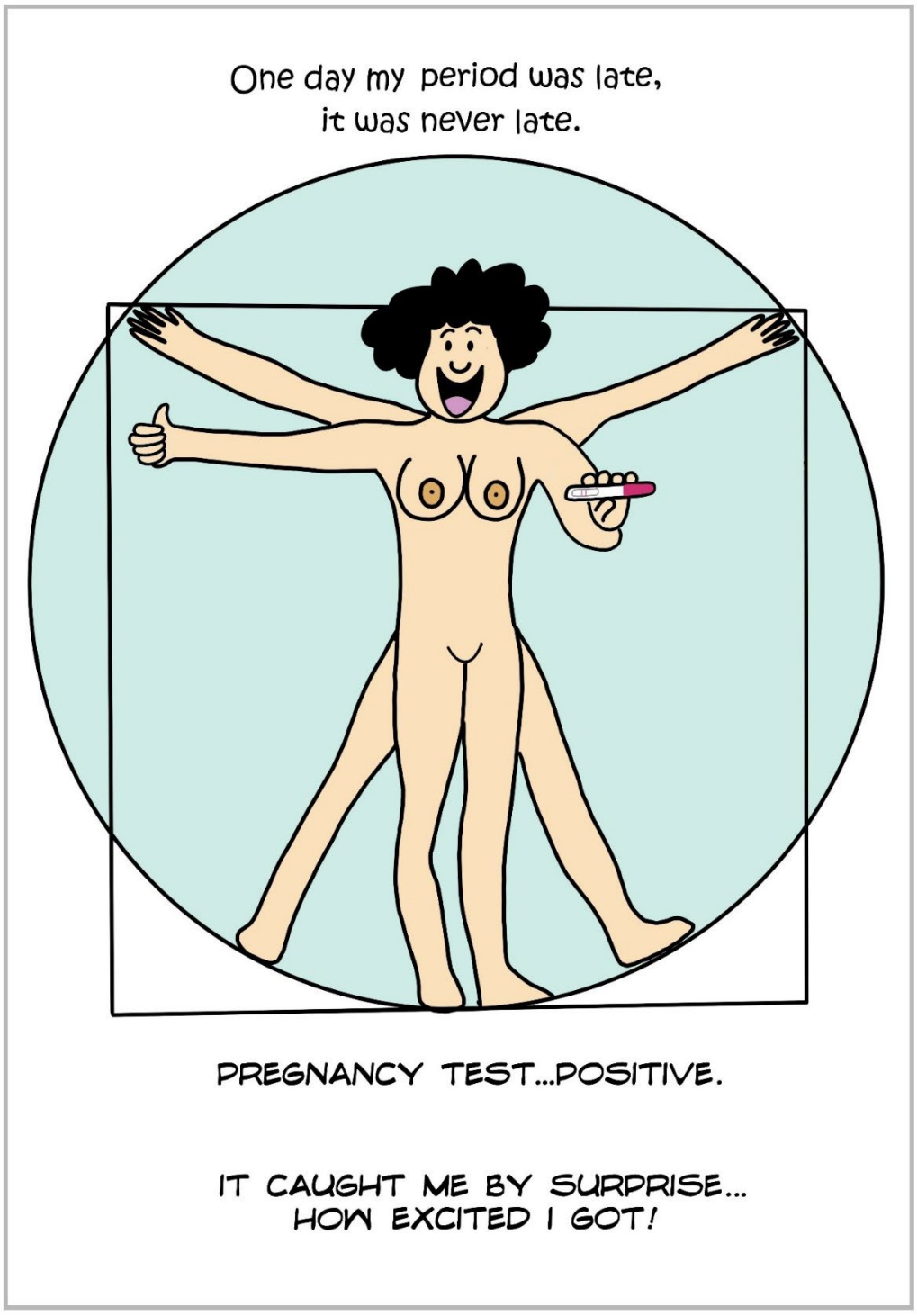
Abstract

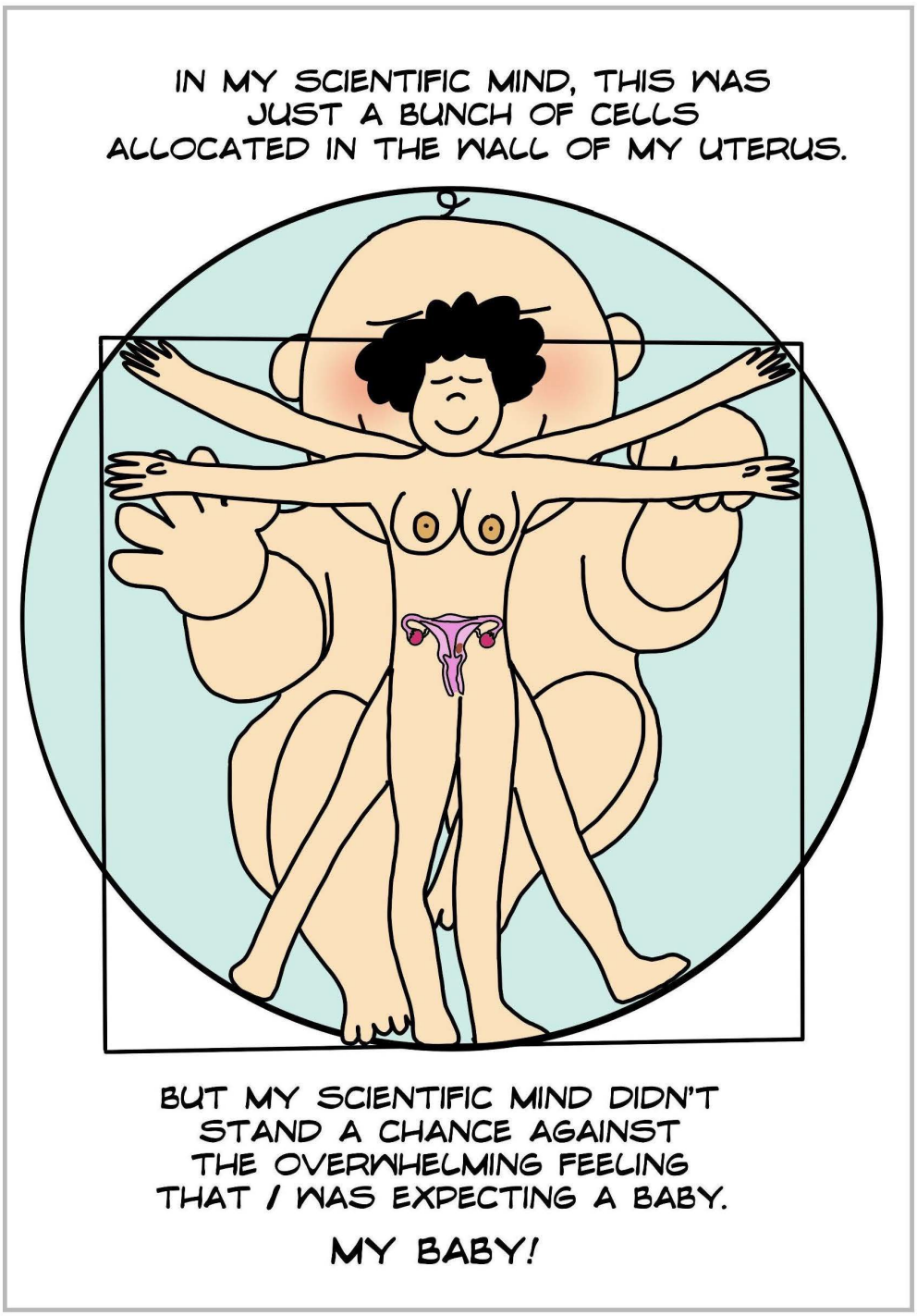
This 20-panel comic visually explores how a health care professional's scope of practice violations, poor bad news communication, and professionalism lapses exacerbated one clinician-artist's embodied experience of pregnancy loss and grief.

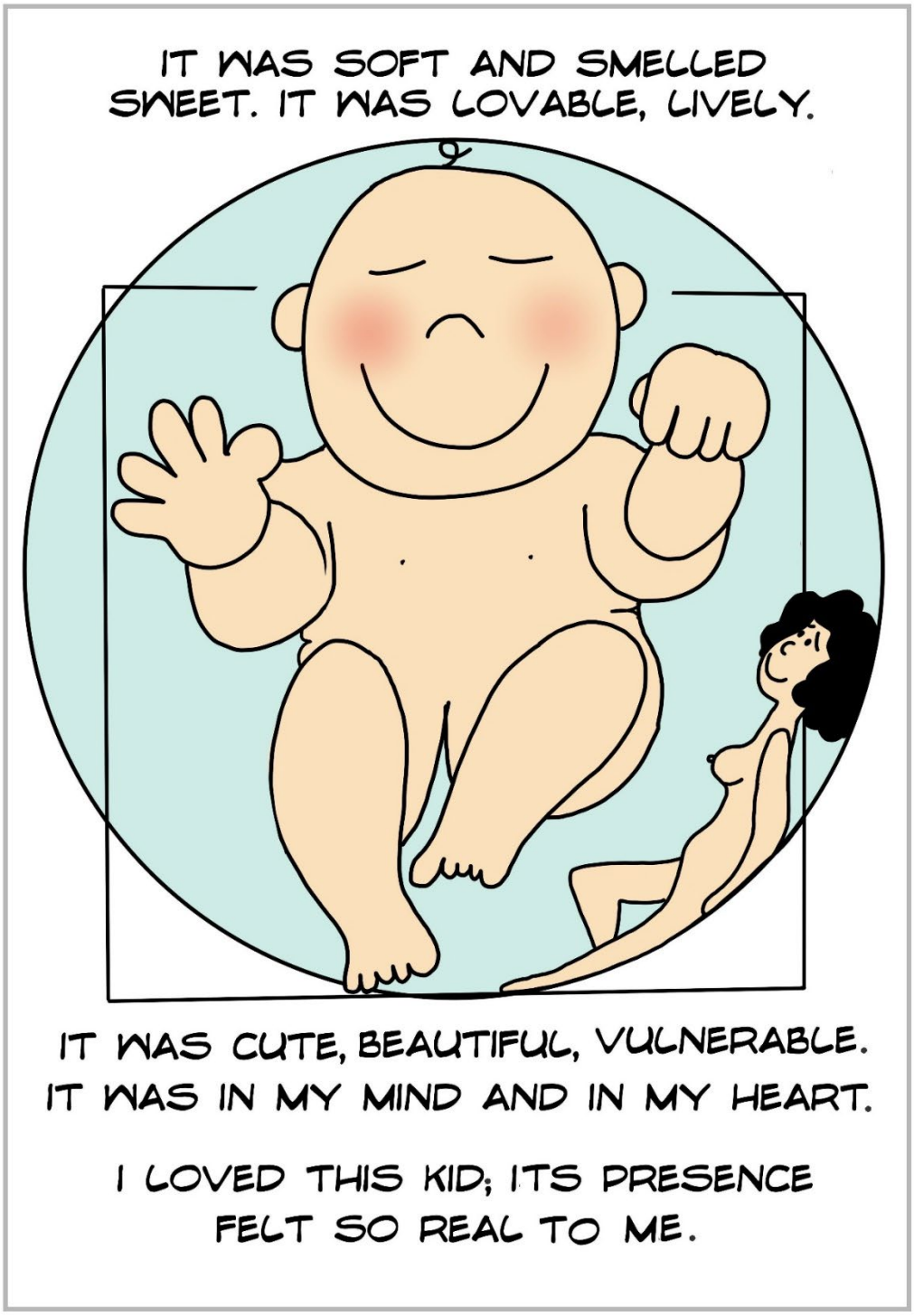
Figure. *There's No Heartbeat*, June 2024

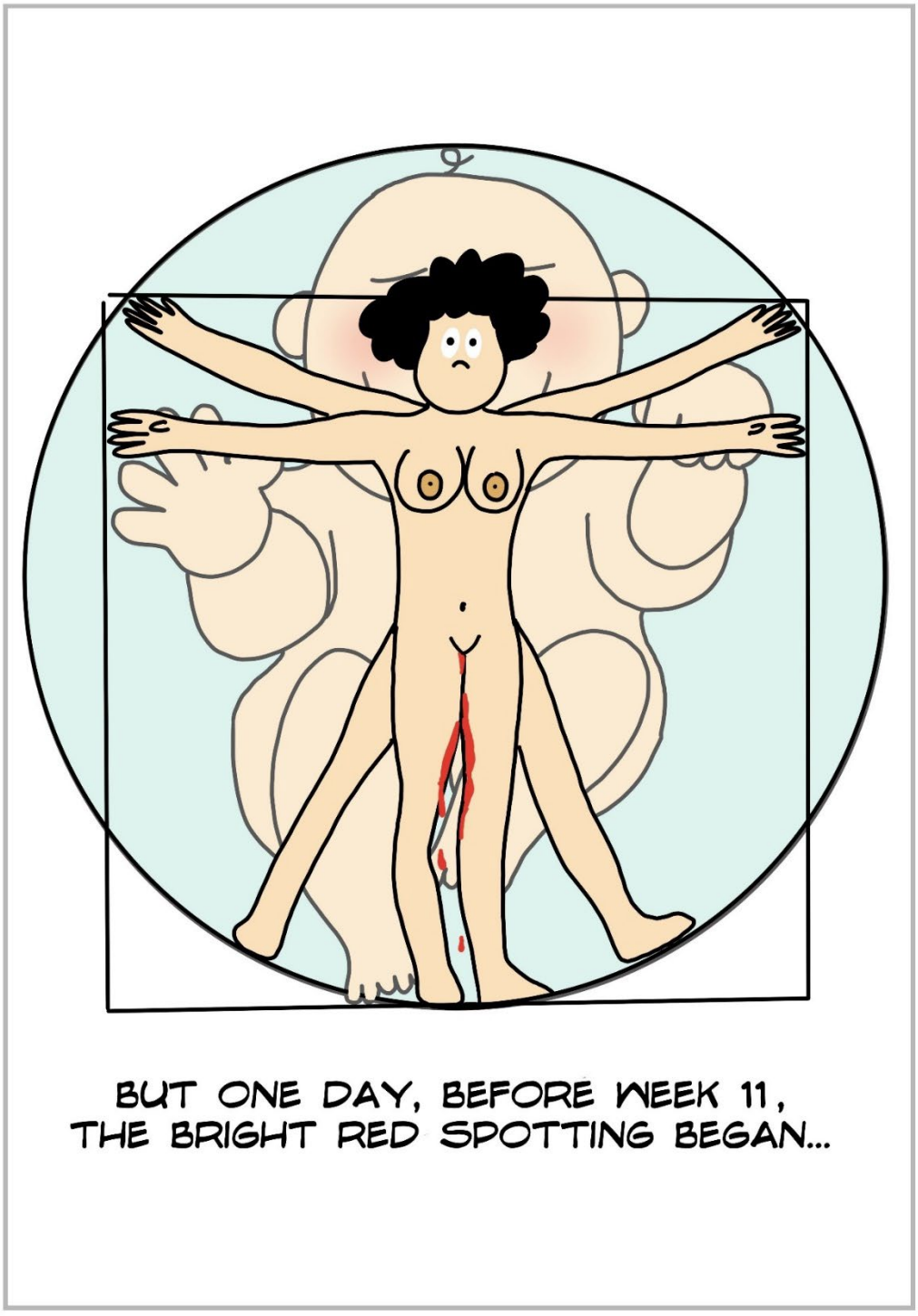


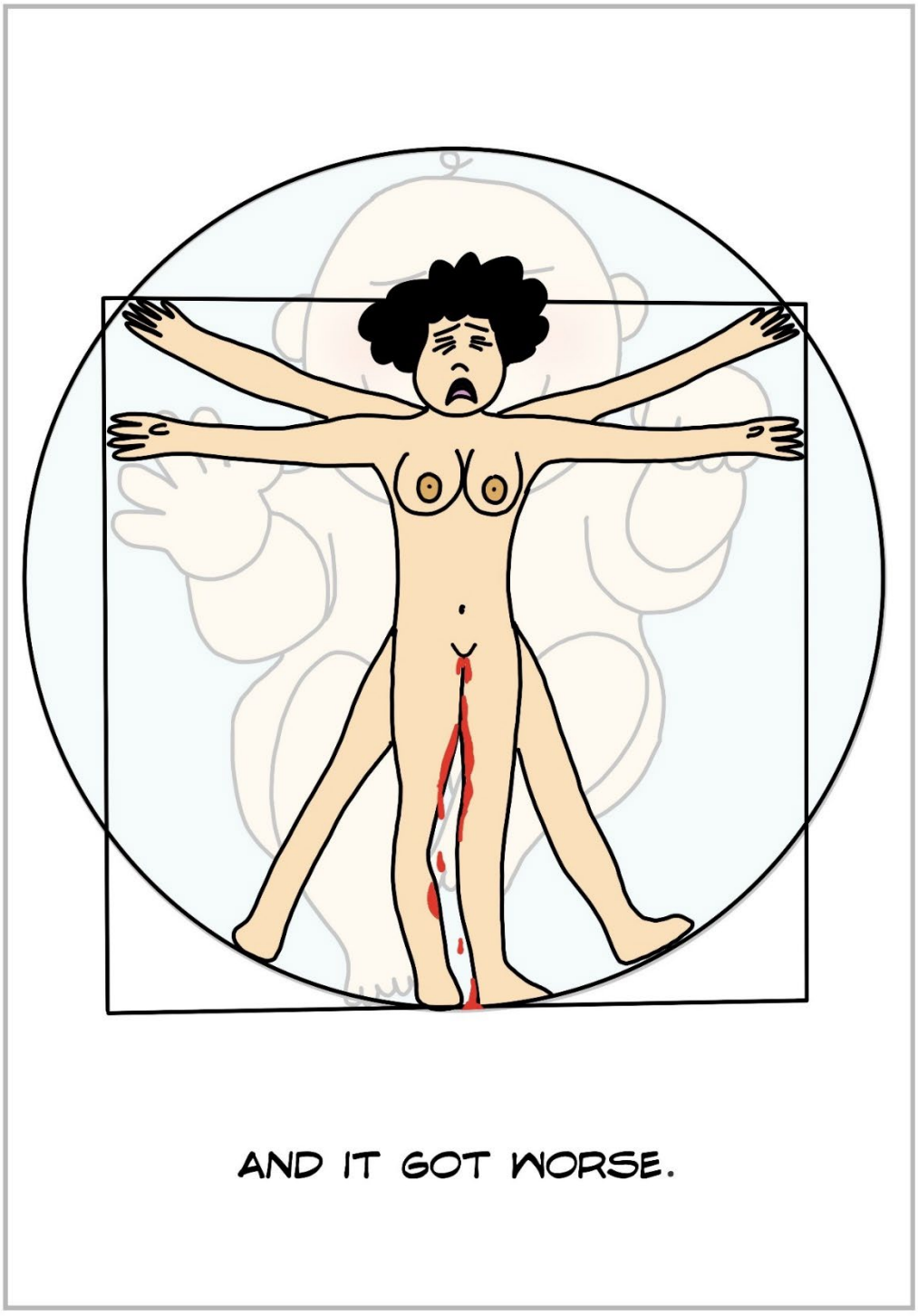

THERE'S NOTHING SPECIAL ABOUT MY STORY...
late 20s
married
professional
AS A WOMAN
AS A DOCTOR
I didn't mind being a mother or not. Both possibilites were fine to me.
I had been taught that an embryo was not a person until it had some neurological development.


One day my period was late,
it was never late.
PREGNANCY TEST...POSITIVE.
IT CAUGHT ME BY SURPRISE...
HOW EXCITED I GOT!


IN MY SCIENTIFIC MIND, THIS WAS JUST A BUNCH OF CELLS ALLOCATED IN THE WALL OF MY UTERUS.
BUT MY SCIENTIFIC MIND DIDN'T STAND A CHANCE AGAINST THE OVERWHELMING FEELING THAT I WAS EXPECTING A BABY.
MY BABY!

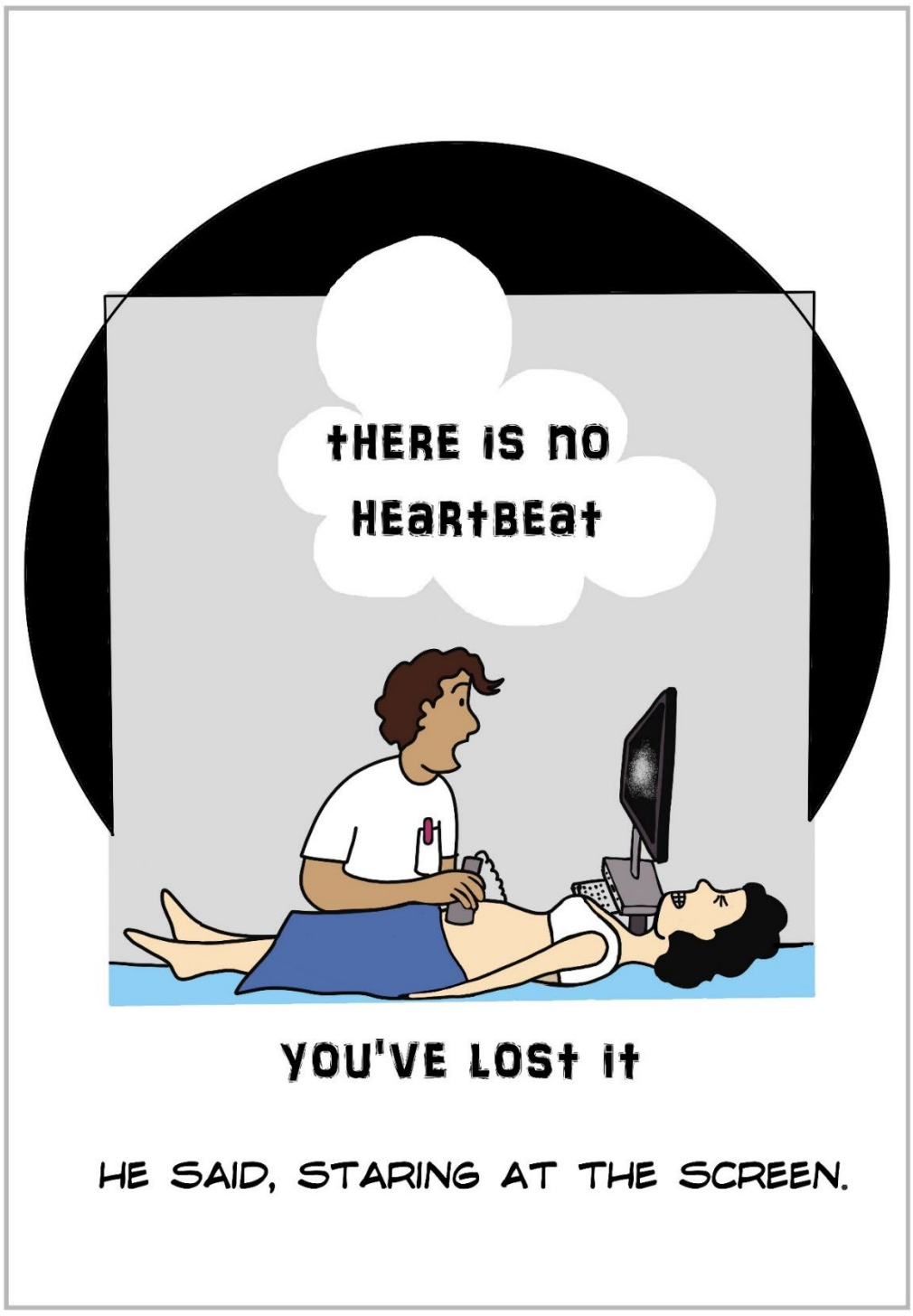

IT WAS SOFT AND SMELLED SWEET. IT WAS LOVABLE, LIVELY.
IT WAS CUTE, BEAUTIFUL, VULNERABLE. IT WAS IN MY MIND AND IN MY HEART.
I LOVED THIS KID; ITS PRESENCE FELT SO REAL TO ME.

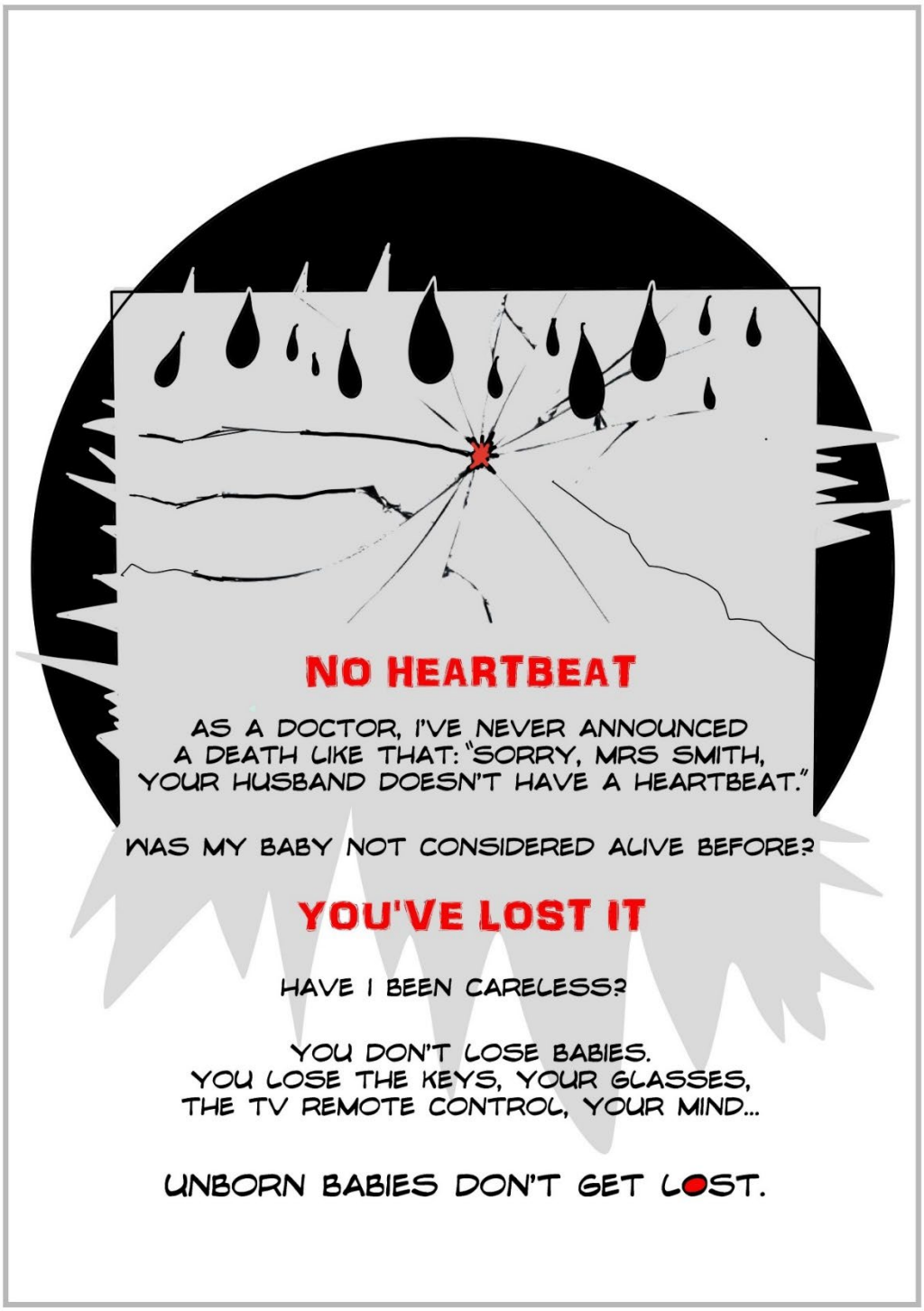

BUT ONE DAY, BEFORE WEEK 11,
THE BRIGHT RED SPOTTING BEGAN...

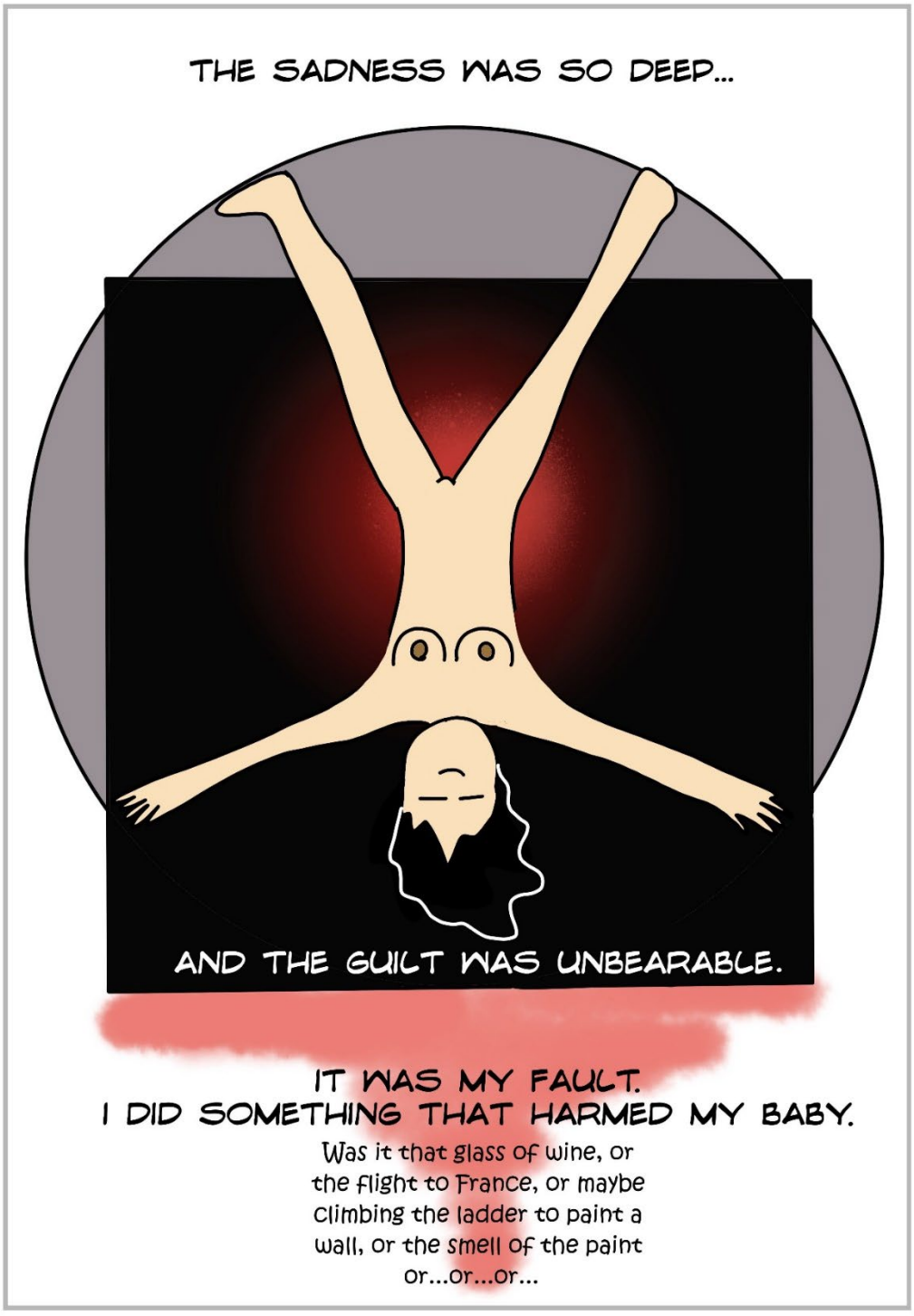

AND IT GOT WORSE.

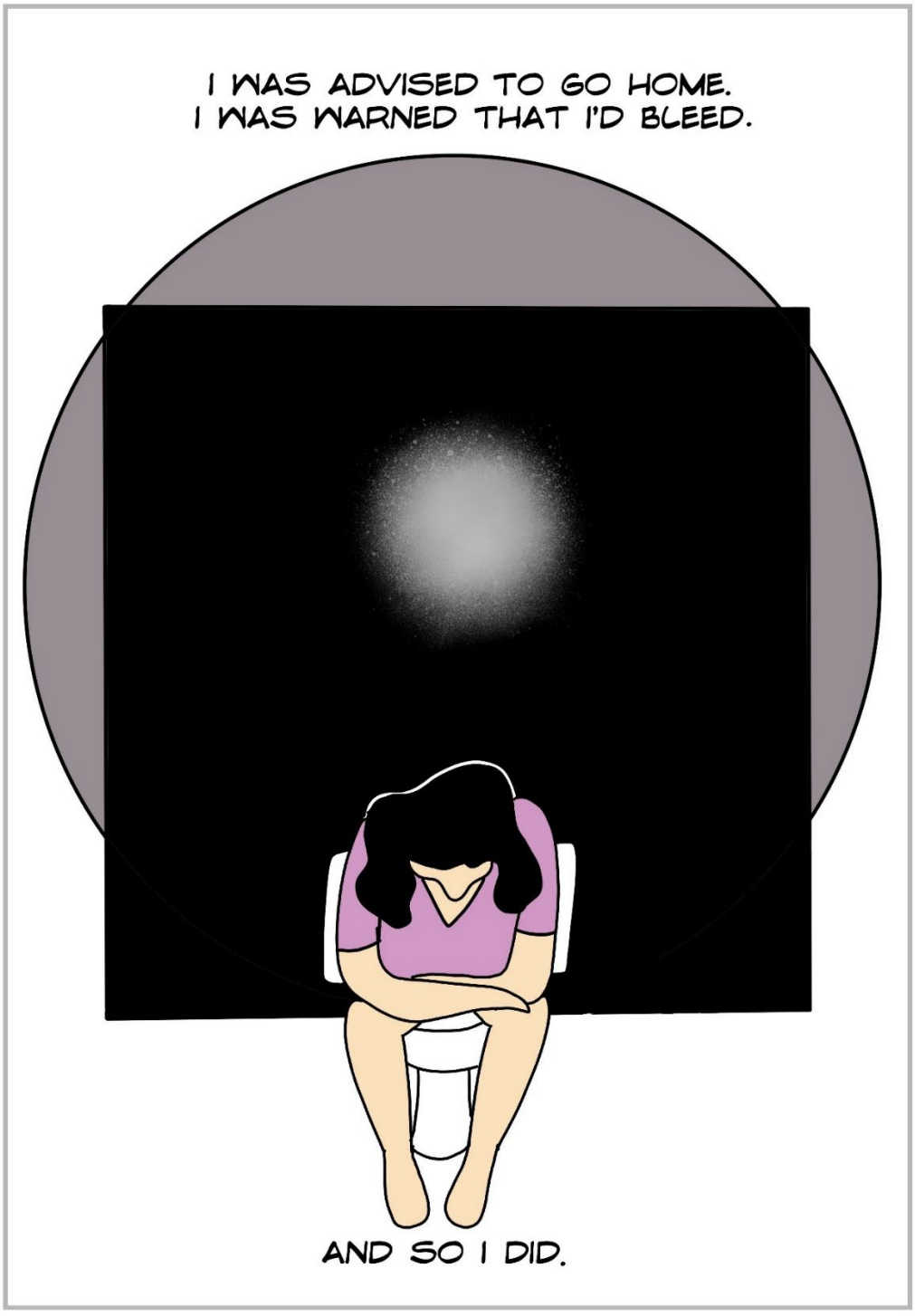

¡PLOP!
IT WAS LIKE A VERY HEAVY PERIOD, WITH CRAMPS AND SOME CLOTS.

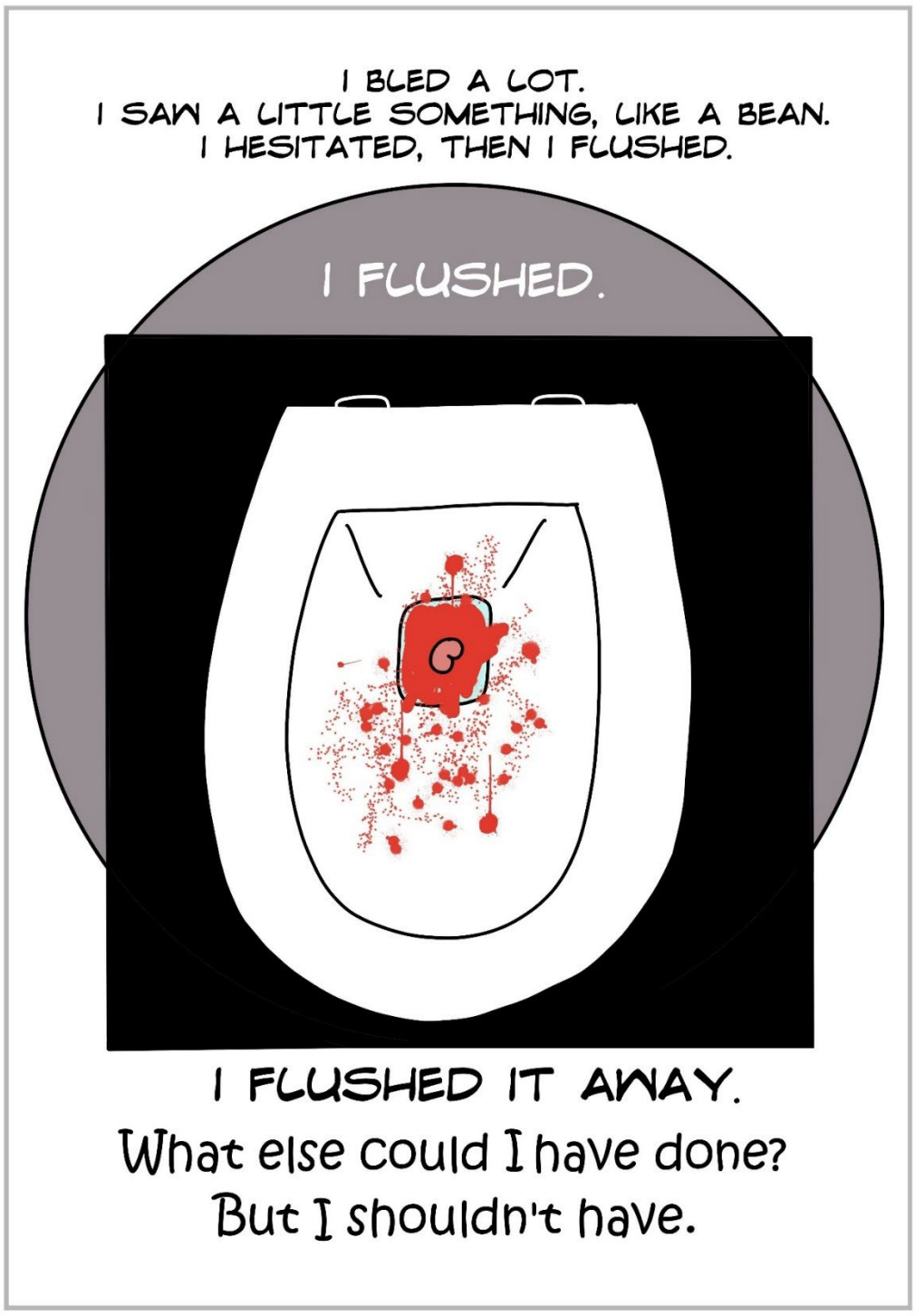

I WAS SENT TO AN EARLY PREGNANCY UNIT.
A NAMELESS GUY DID AN ULTRASOUND.
HE NEVER LOOKED AT ME.


tHERE IS nO
HEaRtBEat
YOU'VE LOSt it
HE SAID, STARING AT THE SCREEN.


NO HEARTBEAT
AS A DOCTOR, I'VE NEVER ANNOUNCED A DEATH LIKE THAT: "SORRY, MRS SMITH, YOUR HUSBAND DOESN'T HAVE A HEARTBEAT."
WAS MY BABY NOT CONSIDERED ALIVE BEFORE?
YOU'VE LOST IT
HAVE I BEEN CARELESS?
YOU DON'T LOSE BABIES. YOU LOSE THE KEYS, YOUR GLASSES, THE TV REMOTE CONTROL, YOUR MIND...
UNBORN BABIES DON'T GET LOST.

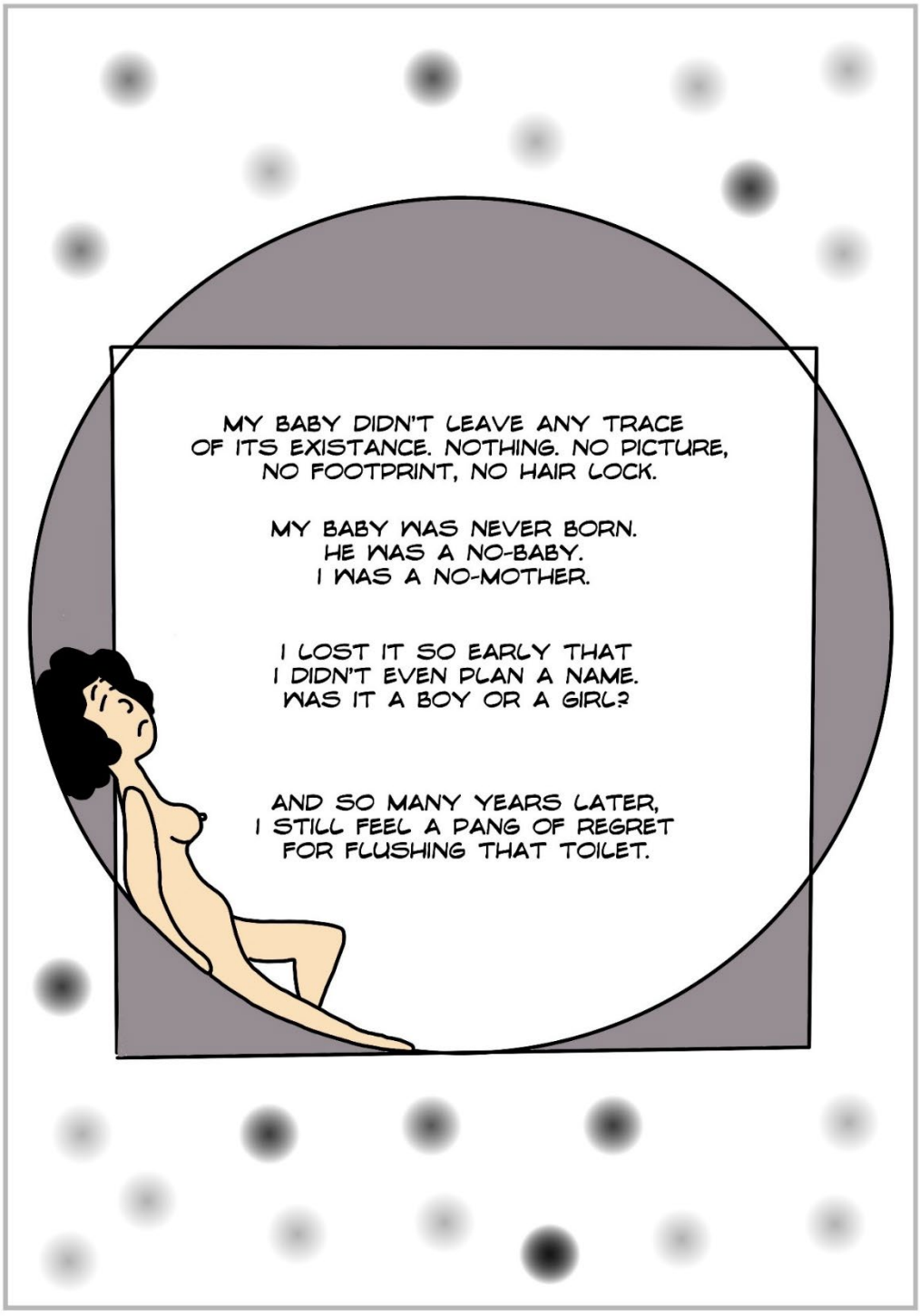

THE SADNESS WAS SO DEEP...
AND THE GUILT WAS UNBEARABLE.
IT WAS MY FAULT.
I DID SOMETHING THAT HARMED MY BABY.
Was it that glass of wine, or the flight to France, or maybe climbing the ladder to paint a wall, or the smell of the paint or...or...or...

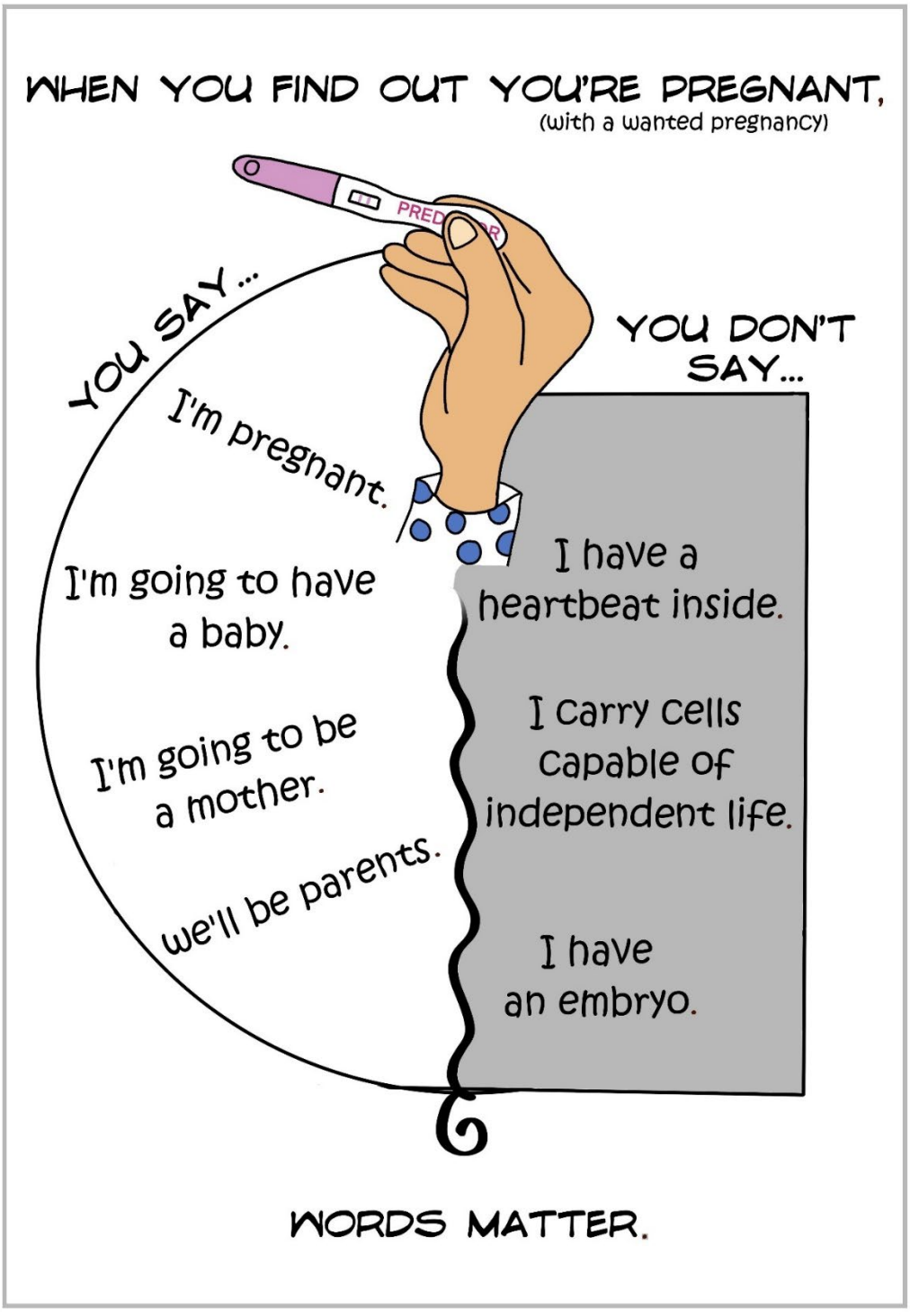

I WAS ADVISED TO GO HOME.
I WAS WARNED THAT I'D BLEED.
AND SO I DID.

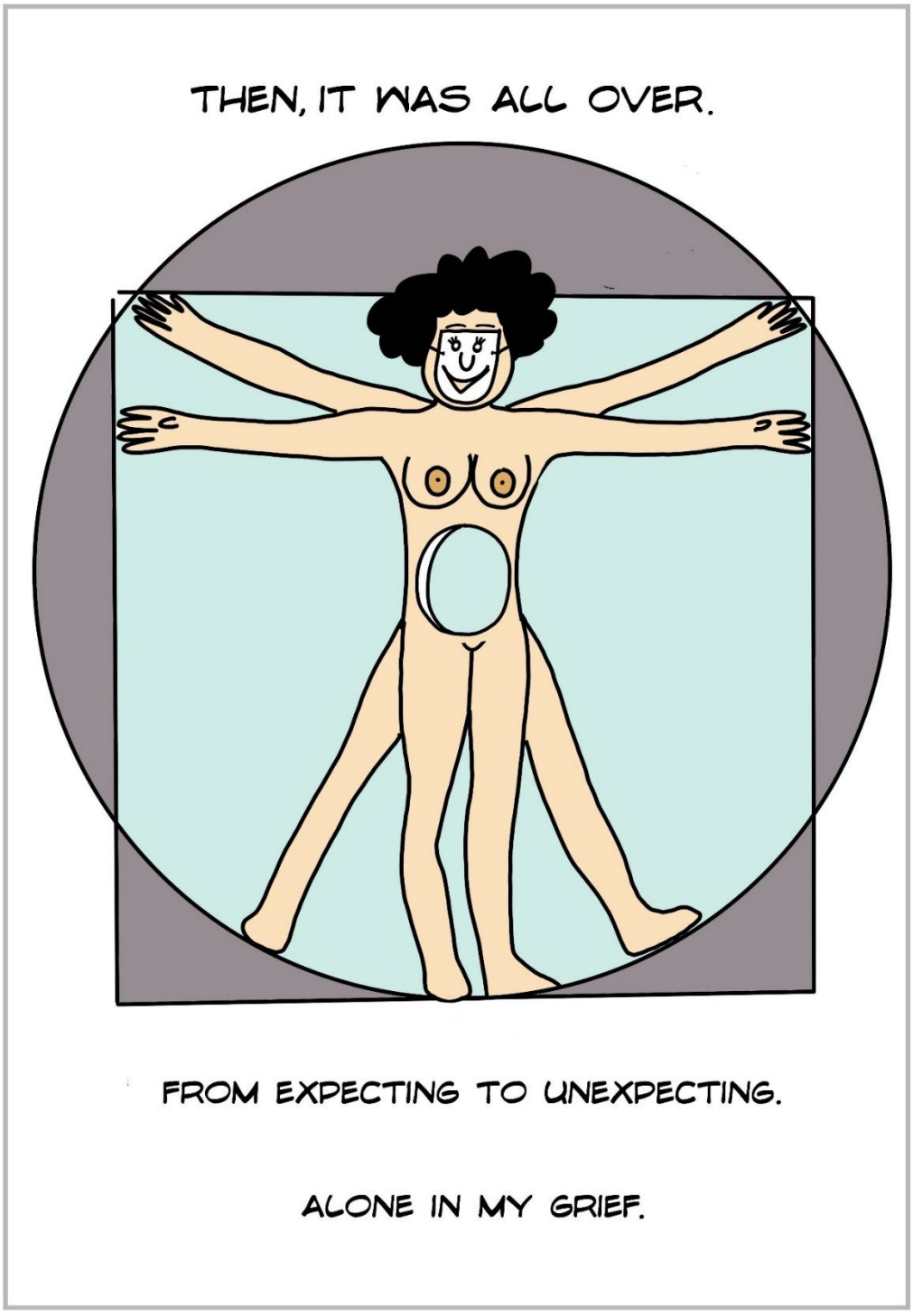

I BLED A LOT.
I SAW A LITTLE SOMETHING, LIKE A BEAN.
I HESITATED, THEN I FLUSHED.
I FLUSHED.
I FLUSHED IT AWAY.
What else could I have done?
But I shouldn't have.


One of every four pregnancies ends up in miscarriage.
WHAT A TERRIBLE PLACE FOR SO MANY LOST BABIES.


WHAT PEOPLE TOLD ME IN THOSE EARLY DAYS...
Well, at least you know you can get pregnant.
There was probably something wrong. It's better this way.
It was early days, just some cells.
You'll get pregnant again very soon.
WHAT I REALLY NEEDED TO HEAR...
I'm so sorry for your loss.
It was not your fault.


MY BABY DIDN'T LEAVE ANY TRACE OF ITS EXISTANCE. NOTHING. NO PICTURE, NO FOOTPRINT, NO HAIR LOCK.
MY BABY WAS NEVER BORN. HE WAS A NO-BABY. I WAS A NO-MOTHER.
I LOST IT SO EARLY THAT I DIDN'T EVEN PLAN A NAME. WAS IT A BOY OR A GIRL?
AND SO MANY YEARS LATER, I STILL FEEL A PANG OF REGRET FOR FLUSHING THAT TOILET.


WHEN YOU FIND OUT YOU'RE PREGNANT,
(with a wanted pregnancy)
YOU SAY...
I'm pregnant.
I'm going to have a baby.
I'm going to be a mother.
we'll be parents.
YOU DON'T SAY...
I have a heartbeat inside.
I carry cells capable of independent life.
I have an embryo.
WORDS MATTER.


THEN, IT WAS ALL OVER.
FROM EXPECTING TO UNEXPECTING.
ALONE IN MY GRIEF.

Media
Hand drawn using Procreate.

Mónica Lalanda, MD, MSc is an emergency medicine physician living in Spain. She is a published graphic medicine illustrator, bioethicist, and mother of two.

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