Advances in Nursing Science
Vol. 45, No. 1, pp. 3–21

Patterns of Knowing and Being in the COVIDicene

An Epistemological and Ontological Reckoning for Posthumans

Brandon Blaine Brown, MSN, RN-BC, CNL;
Jessica Dillard-Wright, PhD, MA, CNM, RN;
Jane Hopkins-Walsh, MSN, PNP-BC, RN;
Chloe O. R. Littzen, PhD, RN, AE-C; Timothea Vo, BS, RN, CTN-B

The crucible of the COVIDicene distills critical issues for nursing knowledge as we navigate our dystopian present while unpacking our oppressive past and reimagining a radical future. Using Barbara Carper's patterns of knowing as a jumping-off point, the authors instigate provocations around traditional disciplinary theorizing for how to value, ground, develop, and position knowledge as nurses. The pandemic has presented nurses with opportunities to shift toward creating a more inclusive and just epistemology. Moving forward, we propose an unfettering of the patterns of knowing, centering emancipatory knowing, ultimately resulting in liberating the patterns from siloization, cocreating justice for praxis. **Key words:** *COVID-19*, *COVIDicene*, *emancipatory knowing*, *epistemology*, *new materialism*, *nursing knowledge*, *ontology*, *patterns of knowing*, *posthumanism*, *rhizome*

Author Affiliations: *College of Nursing and Health Sciences, University of Vermont, Burlington (Blaine Brown); Department of Physiological and Technological Nursing, Augusta University College of Nursing, Augusta, Georgia (Dr Dillard-Wright); Connell School of Nursing Boston College, Chestnut Hill, Massachusetts (Hopkins-Walsh); College of Nursing, The University of Arizona, Tucson (Littzen); School of Nursing, The University of Portland, Olympia, Washington (Littzen); and School of Nursing, University of Connecticut, Storrs (Vo).*

All writing endeavors are collective and accretional, building on the work of those who came before us. To this end, we owe a debt of gratitude to Barbara Carper and all scholars and artists whose work we cite here, including philosophers, nurses, activists, poets, artists, organizers, and theorists who came before us, whose work, often underrecognized, those who inspire us, and who we wish to amplify. We wish to acknowledge the Nursology Theory Collective for their ongoing support. Finally, we would like to acknowledge the love and support of our families as we strive to do just and meaningful work while staying balanced in a time of unprecedented political and pandemic-related chaos. The chaos has direct consequences for nursing practice and education, directly affecting the patients and communities we accompany. Finally, the authors acknowledge a commitment to nonhierarchical, fiercely noncompetitive collaborative scholarship with activism toward abolishing the competitive concept of first authorship in academia. This position is inspired and nourished by the philosophy of internet dance teacher Emilia Richeson's Pony Sweat Aerobics, an embodied noncompetitive approach to collective movement and dance. In this collective spirit of collaboration, we declare that there are no first authors and have listed coauthors alphabetically, a critique of the publication norms that reinforce competition, power structures, and constructed hierarchies in academia.

We received no funding for the development of the manuscript beyond the compost for our collective rhizome we derive from working and thinking collaboratively.

The authors have disclosed that they have no significant relationships with, or financial interest in, any commercial companies pertaining to this article.

Correspondence: *Jane Hopkins-Walsh, MSN, PNP-BC, RN, Connell School of Nursing Boston College, 140 Commonwealth Ave, Chestnut Hill, MA 02467 (walshjm@bc.edu).*

DOI: 10.1097/ANS.0000000000000387

IN 1978, Barbara Carper published "Fundamental Patterns of Knowing in Nursing" in the inaugural issue of *Advances in Nursing*

Statements of Significance

Nursing has a tradition that enfolds multiple ways of knowing first articulated by Barbara Carper in 1978, identifying empirical, aesthetic, personal, and ethical patterns of knowing as critical for nursing. Carper's work played a foundational role in the nursing episteme of the 20th century and offers insights for points of departure for nursing episteme in the 21st century.

Positionality of the Authors: We include the Table, "Positionality of Authors," to describe our positionalities and identities as nurses and scholars. We understand this transparent positioning as an intentional praxis for anti-racist action and accountability, recognizing the pervasive white supremacy and power inequities in nursing. This also aligns with anti-racist frameworks for scholarly publishing.[1] In this article and others, we intentionally capitalize Black, Brown, Person of Color, Indigenous, Hispanic, and Latinx and use lower case for "white" people as an act of political resistance. Given the centrality and emphasis that Western thought has afforded whiteness through history, we have chosen to forgo capitalizing white to more fully center identities that are not rooted in whiteness. This is an action of conscious queering of power through letter capitalization.

What is known or assumed to be true about this topic?

Barbara Carper's 1978 writing on the patterns of knowing in nursing is foundational to epistemological projects in nursing. This foundation has expanded to include patterns of emancipatory knowing added by Chinn and Kramer in 2008, sociopolitical knowing, added by White in 1995, and unknowing, added by Munhall in 1992. These more recent additions expanded Carper's original patterns to include nursing's social justice mandates. The ongoing scholarly work on patterns of knowing suggests a broad terrain of possibility for nursing knowledge creation. However, as they are currently conceived and reflected in educational curricula and practice, the patterns delimit knowledge production, prioritizing extractive, empirical ways of knowing in a manner that defies the integration and holism of nursing.

What this article adds:

This article reconceptualizes patterns of knowing for nursing with a posthuman and new materialist lens, teasing out the connections, deconstructing the artificially constructed barriers that ostensibly reduce and separate the patterns. Our discussion of the patterns of knowing in nursing is inflected by the all-consuming 2020 global reality of the COVID-19 pandemic as a phenomenon that disproportionately impacts people who are historically underserved and marginalized by the dominant discourses in health care including the elderly, Indigenous people, disabled people, queer people, immigrant people, low-income people, and all POC, as well as those who are incarcerated as a function of preexisting structural inequity. This acknowledgment highlights the urgency of recognizing emancipatory and sociopolitical knowing as core epistemologies for nursing.

Science.[2] As of April 2021, Carper's influential work has been cited 3772 times. Carper's[3] fundamental patterns structure approaches to hospital clinical ladders, shape curriculum, and continue to inspire knowledge development in nursing. Both accessible and familiar, Carper's work became an organizing force for nursing thought. However, as we live, practice, research, and educate amid the perils of the 21st century, these patterns converge, coalesce, contradict, and collapse. The perils we face include an ongoing pandemic;

Table. Positionality of Authors

Author	Pronouns	Key Identities	Salient Assumptions and Biases
Brandon Blaine Brown	He/him/his	white, able physical body, queer-cisgender-man, husband, settler-colonizer, nursing faculty, clinical nurse, EdD in education student	Aspires for liberatory pedagogy and emancipatory nursing. This starts with critical self-reflection. I benefit from white male privilege, white supremacy, capitalism, and dispossessed Indigenous lands. This has led to biases around gender, ableism, marginalization, racism, and racial trauma.
Jess Dillard-Wright	She/they	white-fat-queer-genderqueer person, PhD-prepared nurse faculty, mom to great kids, spouse to fabulous woman, scholar-activist, nurse radical	Equity and justice are the purview of nursing and are desirable ends unto themselves. Working on unlearning internalized white supremacy, colonialism, misogyny, ableism, and homophobia while resisting compulsory heterosexuality through critical self-reflection. It's a process and a prerequisite for liberation. Benefit from class, race, and educational privilege in a capitalist and colonialist context.
Jane Hopkins-Walsh	She/her/hers	white-nondisabled, cis-hetero-woman, mother, wife, settler-colonizer, pediatric nurse practitioner and nursing PhD candidate, activist-scholar	Aspires to liberatory and emancipatory nursing practice; advocates for universal health care; benefits from dispossession of Indigenous lands, capitalism, and white privilege; career work accompanying historically underserved populations; biases within all identities requires commitment to lifelong anti-racism and anti-oppression, anti-colonial self-education, and ongoing critical reflexivity.
Chloé Olivia Rose Littzen	She/her/hers	white-cis-hetero-woman, differently-abled, immigrant, settler-colonizer, educator, scientist, theorist, activist	Intermodernist; all nurses have epistemic authority and nursing can be an act of justice. Committed to the personal, daily, lifelong consciousness raising required to enable justice and equity for those who have been historically and/or contemporarily marginalized and oppressed. Benefits from race, class, education, and sexual orientation privilege in a capitalist and colonialist context.
Timothea Vo	She/her/hers	Femme, demisexual, bicultural, Asian, American-born, daughter of immigrants, bedside nurse, Nursing PhD student, qualitative nurse scholar, transcultural nursing, caring science	Hegemony, model minority myth, privilege. Aspires to appreciate decolonial or postcolonial viewpoints among historically oppressed groups; traditional and nontraditional lifeways and practices, and their inter- and intravariations. Aspires to embrace past, current, and future experiences that may engender both undefined and concrete multiplicities.

climate change; systemic and institutional racism; persistent homophobia, transmisia, and misogyny; unfettered and corrupt free-market capitalism; and white fascist uprisings that lead us to question. Here, we question the utility of isolating modes of knowledge production and patterns of knowing, without a thorough examination of contemporary knowledge production and the connected meaning of lived experience. Collaboratively, we are inspired by writer Arundhati Roy's vision of the pandemic as portal for transformation, a chance to start anew, a time to jettison that which no longer serves.[4] In turn, we wish to disrupt the ontological center of the discipline, interrogating the accepted knowledge-making practices of the past in hopes of speculating a shared future for both human and nonhuman flourishing in living and dying.[5]

The order of things for our disruptive vision of the COVIDicene first requires that we attend to the details of our present, framing our thoughts in an abolitionist vision of nursing as posthumanism. We then turn to Carper's familiar patterns, recast for our pandemic times, as a set of 4 distinct essays on empirical, personal, aesthetic, and ethical knowing.

Conceptualized as a bricolage, each of Carper's 4 patterns were addressed by one of us individually, contextualized in the COVIDicene, and then woven together with the threads of emancipatory knowing in nursing, intentionally enmeshed through collective thinking and speculative visioning.

UNTANGLING AND RETANGLING THE PRESENT

We begin: we currently live in a perilous time that geologists call the Anthropocene.[6] "Anthropocene" refers to the geological era that began when human activity began shaping the planet in profound and indelible ways. These forces were predicated on slavery, imperialism, capitalism, environmental degradation, and the consumption of fossil fuels.[7] As part of this unfurling process, ecological domination took root, and humans began to interact with other worlds, both living and nonliving, through conquest and subjugation.[8] In our present, an ongoing blending of the biotic (living) and abiotic (nonliving) ecospheres has burst forth, the previously firm ground on which we have planted our neoliberal and colonial empire has begun to shift.[9] These are the logics of the posthuman turn and new materialism. Posthumanism destabilizes the boundaries between human and nonhuman, nature and culture, science and humanities.[9] New materialism draws from the situated subjectivity and embodied perspective of the human and nonhuman subjects as beings all made of matter that matters.[10] Humans and nonhumans now find ourselves entangled in a new era of shared living, here referred to as the COVIDicene, in which a nonliving world is colonizing mortal earthbound beings, sending our neoliberal way of life into a frenzy. In reality, humans have subjugated the nonhuman world for many centuries, a product of the ongoing exercise of colonial subjection. This pattern of subjection targeted other humans, deemed by those with power and capital as less than human, violently forced into work as their lands were stolen, legacies co-opted, lives ended.[7] It is the coalescence of these material worlds that nursing academe must now reckon with, navigate in, take apart of in order to produce equitable knowledge for the present-future.

The inanimate world of COVID-19 has emerged from the depths of nature as an enemy of the present, against which mainstream nursing academe—alongside mainstream media—declared a so-called "war." How is it that we are at war with a microscopic entity tucked at the interstice of living and nonliving? COVID-19, we posit, is a by-product of our ongoing bad romance with ecological imperialism. This then challenges us to consider what count as knowledge in the COVIDicene. At the root of these queries is a crucial reckoning: COVID-19 undoubtedly affects us all. It is no secret, however,

that COVID-19 affects those who have had to endure centuries of systemic and institutional racism the most.[11] With this in mind, equity must be the basis of all being and knowing in nursing, nursing's ontology and epistemology.[12] Equity must constitute the chief underlying purpose of inquiry in the COVIDicene and beyond. As we negotiate this reckoning, we acknowledge that others assert that nursing *is* social justice,[13] founded in emancipatory knowing.[3] As some of us have written elsewhere, however, we understand this as a worthy aspiration rather than a present reality: nursing is not now and has never been about equity or justice universally, even if it purports to be about caring.[14] This ultimately leads us to question the possibilities for knowledge generation, strumming tensions implicit in the nonunion of ideas around nursing's core values and thus what constitutes nursing knowledge, the impetus and focus for this article.[15]

We situate our work here in the "COVIDicene," a neologism coined by nurses in blog posts and on social media to signify the indelible, inequitable, indubitable mark of COVID-19 on the Anthropocene. Generating the type of human and nonhuman knowledge needed in the COVIDicene requires nursing to attend to epistemologies that extend beyond the Western primacy of anthropocentrism, modes of inquiry that recognize the knots between human and nonhuman worlds.[8] Although the cosmos always has been politically contested, the wheeling and dealing complexities of the pandemic exaggerate these dynamics, amplifying the precarity of already precarious factions, underscoring the politics of inquiry.[9] While Carper's framing included epistemic pathways that created the possibility for weaving the art and the science of nursing together, the discipline prioritized empirical patterns of knowing in a play for legitimacy in the mid-20th century, choosing to define nursing as a science.[16] In light of the fraught historical threads that connect our worlds, we imagine new modes of knowledge creation for a future that centers relational openness, power, freedom, and resistance for all things, living and nonliving. To this end, McGibbon et al[17] recognize both the colonizing and colonized dimensions of nursing's current epistemological practices, noting that nursing knowledge is primarily based on Eurocentric, racializing discourses. As a process, a practice, nursing itself imposes colonial order on individuals and communities past and present.[17] This is not an assertion that requires, in our estimation, further justification. Instead, this is our point of departure. The present colonial arrangement leaves ethically destitute modes for thinking about well-being, health, and illness in which colonialism, globalization, pan-capitalism, and environmental degradation foreclose on alternate possibilities and constitute the precursors of our contemporary condition.[17]

With our current schema of inquiry in nursing, we run the risk of turning the coronavirus "war" into another white man's lament. We honor and acknowledge that People of Color (POC) carry centuries of knowledge and lived experiences in surviving, enduring, and thriving in the face of inequities and oppression. Indigenous scholar Vizenor calls this "survivance," the "stories that are renunciation of dominance, detractions, obstructions, the unbearable sentiments of tragedy, and the legacy of victimhood."[18(p1)] Telescoping out, we can see COVID-19 as a symptom of a much more significant problem, centuries in the making.[4,7,19] To reckon with this—and much more importantly to act in a reparatory fashion—the enclosure of nursing academia must embrace alternative ways of knowing by dissolving hierarchies and boundaries. We do not frame our vision as a "paradigm shift" for nursing because that device recreates the positivist hierarchies and systems we wish to dismantle. Instead, we propose knowledge making arising from relationships, projects, activism, and communities.

Academe is not the sole arbiter of what constitutes nursing knowledge, however.[20] Knowledge evolves organically and synergistically from the individuals and communities

we accompany. This includes, but is in no way limited to, situated, anti-oppressive, decolonizing, Indigenizing, posthuman, and arts-based methodologies for present and future praxes. In this transformation, we insist that all knowledge-making practices are meaningful. As nursing reckons with its racist, colonial, and oppressive knowledge practices, it is critical that we acknowledge the epistemic injustice that has silenced some ways of making meaning, particularly those that deviate from the hegemonic norms of empiricism.[14] To this end, we recognize all knowledge and nonknowledge as relevant, irrespective of the mode of inquiry. Furthermore, we see that knowledge production continuously takes place outside of the technologically mediated scientific university, technorational clinical space, and other neoliberal enclosures.[9,21]

All nurses cocreate realities and knowledge, independently and as part of broader communities of theorizing, praxis, and knowing, a function of their epistemic authority.[22] In the COVIDicene, all folks are knowledge collaborators, muddled together with plants, animals, water, sky, the earth, and, in our current crucible, the abiotic COVID-19 virus. Honoring the genealogical source of our inspiration requires us to recognize the Indigenous wisdom practices that have led us to our current modes of posthuman thinking. Giving thanks to these roots requires us to consider our sense of place in the world. Indigenous botanist Robin Wall Kimmerer describes this act as "something swells around you, and in you when you listen to the world,"[23(p49)] drawing our attention to the material world and our places in it.

As we continue to untangle and make sense of our received disciplinary history, we find that Chinn and Kramer[3] make space for all patterns of knowing in nursing practice. Despite this, we continue to see hierarchical threads throughout nursing discourse and nursing realities that prioritize empiricism above other ways of knowing. However, the knots of reality require contemporary nursing knowledge production to weave together the worlds of empirical, aesthetic, ethical, personal, and emancipatory knowing. Knowledge production—nursing included—has innumerable points of entry, and emancipatory knowing could be understood as the rhizomatic tangle fusing all knowledge generation in the COVIDicene.[24] In 2007, Chinn and Kramer developed the pattern of emancipatory knowing, a pattern "that focuses on developing an awareness of social problems and taking action to create social change."[3(p2)] We see the pattern of emancipatory nursing as an integral boundless, encompassing episteme that informs all other patterns of knowing, all the while attending to the ways that power and oppression inflect the material world in order to unravel these forces.

With this in mind, we understand liberation as the rightful basis of knowledge-making practices in nursing, which prompts us to question the current state of the discipline. As we imagine a future not yet present, we undertake an examination of the current epistemological practices within the field of nursing. Here, we include the urge to delimit knowledge by forcing it into predefined binary boxes that are rooted in Enlightenment notions of empiricism and empire—colonialism and oppression. This requires ontological reimagining in the discipline, reorienting to the polyvocal modes of knowing that cocreate the realities of nursing. This requires an abolition of sorts, dismantling the reductivist modes of knowledge production so prized by the institutions that shape and constrain nursing. *All* patterns of knowing are required for meaningful nursing care, not just those that are easily and conveniently quantified, counted, or capitalized. Chinn and Kramer[3] advocate for the 5 patterns to weave together in order to provide effective nursing care. We extend this argument, resisting the buckets, hierarchy, and binaries that have previously been used to categorize knowledge, composting any boundaries on how and what is known, knowable, knowing. We further embrace patterns of knowing as yet discovered,

presently suppressed, or refused as colonizing while recognizing that, despite Western entitlement and colonialism, not all knowledge is *for* white settler colonizers to know or arbitrate.[25] Carper's ideas, ultimately, lead us to the limits of nursing praxis. As such, we recognize the imperative to embrace modes of knowledge production long dismissed such as storytelling, poetry, graffiti, dance, gardening, art making, to name a few, and to imagine modes yet to be conceptualized.

As we gaze on our dystopian present-future, we examine the potentiality of nursing knowledge production in the COVIDicene and beyond. We imagine epistemic arrangements that make life more equitable for human and nonhuman flourishing, conjuring possibilities not yet realized. We go on to advocate for knowledge-making practices that embrace alternative modes of inquiry without boundaries, what Indigenous scholar Shawn Wilson[26] describes as ceremony, yoking together human and nonhuman knowledge for multispecies flourishing.[8] This ultimately mandates that Carper's 4 patterns of knowing are fused, becoming embodied, active, and relational, a turn that strengthens the bond between the academe, practice, and community-led activism by eroding any division between them.

THE FUNDAMENTAL PATTERNS REVISITED IN THE COVIDicene

The section that follows is a collection of 4 essays from 4 authors that engage Carper's patterns, beginning with empirics and trailing through aesthetic and personal knowing, concluding with ethical knowing, bridged with connections to emancipatory, posthuman knowing. In our collaborative work, however, we recognized entangled fusion of these patterns, entwined knowledge-making practices of the COVIDicene. Each of us engage in our nursing praxis from multifaceted but intertwined perspectives in the discipline, including clinical practice, research, and education. We retain singular first person in each of the patterns essays to recognize the contributions and to affect a polyvocal subjectivity, congruent with the emancipatory patterns we see as the glue of the discipline, though we also use collective first person in our editorial voice. These essays highlight the entangled nature of nursing knowledge production that is required to reckon with nursing's past, meet the present moments of the COVIDicene, and define the nexus of nursing knowledge generation for the 21st century and beyond.

The following patterns of knowing are articulated by the essays that follow Carper's early framing, intentionally paralleling Carper's work. Chinn and Kramer's[3] emancipatory pattern of knowing is not treated separately and has instead been woven throughout each exemplar to highlight the boundless and essential nature of its liberatory principles to the discipline. Knowing and activism are not separate, particularly when we accept emancipatory knowing as the solder that fuses all other ways of knowing—inseparable. Rather, knowing and activism in this ontological view are deeply entangled, embedded within relational nursing practice. Our hope is that inclusion of emancipatory principles throughout and between each essay will ultimately unfetter the patterns of knowing from singular and exclusionary foci toward a more epistemically just and holistic approach to knowledge production. We begin with empirical ways of knowing.

POSTHUMAN EMPIRICS (DETANGLED) IN THE COVIDicene*

Classically understood as the science of nursing, empirics is often the first pattern of knowing introduced in nursing education.[2] The primacy of empirical knowing in nursing education is based on the *assumption* that "what is known is accessible through the

*Essay author: Timothea Vo

physical senses, particularly seeing, touching, tasting, and hearing."[3(p10)] Our bodies, we have been taught, have basic entry points for human experience: that which we can see, hear, and touch are easier to understand than something "abstract" and "ambiguous" like emotion. However, prioritizing empirical ways of knowing in this way reinforces ableism and mind-body dualism while denigrating ways of knowing that emanate from the other patterns. Laboratory values, vital signs, and even healing processes are just a few examples of what we as nurses can see, hear, and touch to gain new knowledge, or understanding, about a patient, but these numbers alone cannot tell the whole story.[27] We have constructed nursing education, in our efforts to craft disciplinary legitimacy as an academic science, on the merits of empirical knowledge.[16] This has the pernicious influence of subsuming other patterns of knowing, framed as preference, as afterthought.

Reflecting on the assumptions of objectivity, historian of science Mel Kranzberg quipped, "Science is neither good, nor bad. Nor is it neutral."[28(p547)] In meditating on the confluence of empirics and praxis that constitutes the technologies of nursing, nurse theorist Pamela Reed observed that "technology provides new means for nurses to observe the unobservable, to facilitate wholeness in a posthuman culture, and generate new knowledge about nursing processes that enhance well-being.[20(p31)] These thoughts gesture at the constructedness of science, of technology, of empiricism as a worldview, prompting me to reflect on the influence of positivist philosophy of science on nursing, leading me to interrogate the assumptions of empirics as a pattern of knowing for nursing. Interrogating assumptions gives rise to questions of absence, of what is deprioritized, subsumed, and silenced.

Overreliance on empirical evidence, that which the nurse can see, hear, and feel, is a form of blatant erasure, eliding the wholeness of human experience in favor of that which can be seen, smelled, touched—easily explained. Far too often, empirical data are uncritically accepted as neutral, as knowledge without excavating the systems, structures, and technologies—often based in white supremacy—that produce "evidence."

In our COVID times, the example of pulse oximetry is a measurement that is particularly prescient. To this end, Sjoding et al[29] recently found that pulse oximetry monitors, a technology frequently used in emergency, critical care, and care of people with COVID-19, fail to detect hypoxia in Black people 3 times more often than in white people. This is not an isolated phenomenon: an example of bias internal to a technology, this failure is accompanied by a praxis of physical assessment based in whiteness. In white-normative health education settings, cyanosis is frequently described as "bluish lips or face," a finding most visible on white skin.

Teaching assessment findings on darker skin tones are frequently omitted or ignored in nursing education, which means early detection may be missed by nursing staff.[30] This falls prey to irony because skin color assessments are not "one size fits all." In other words, what appears to be cyanotic for white skin may or may not be cyanotic for Brown or Black skin, let alone differences between two nurses' assessments can vary. Therefore, clinical implications for Black and Brown persons are different from white persons. Practice that is generally based upon white-framed science can disservice the nursing care of Black and Brown people. These respiratory measures, like pulse oximetry readings and acute skin color changes, so relevant to the care of folks with COVID-19, demonstrate how empirical assessments and the technologies they rely on are white-centered, reinforcing white supremacy and injuring Patients of Color, a critical nexus and entry point for harm.[31]

This is perhaps not surprising, given that, historically, physicians and nurses espoused race as a scientific reality. Race, the logic goes, is an inherited biological difference and not the material realities of an unequal society. Instead, variations—inequities—in health outcomes are caused by biology.[32-34] Consider another example. Across comparable countries, the United States has the highest

maternal mortality rate in the world.[35] Examining this rate more granularly demonstrates that Black women are dying at rates higher than their counterparts, even when controlling for confounders.[35] According to Artiga and colleagues,[36] the mortality rates for Black and American Indian and Alaska Native people are 2 to 3 times higher during pregnancy than for white women. Descriptive and reductive work like this, however, cannot fully explain the differences Black women experience in health outcomes related to pregnancy. Another example of this can be in estimated glomerular filtration rate (eGFR), a laboratory indicator of renal function that is interpreted using race-based "correction" for Black people.[37] This so-called correction creates a higher threshold for the diagnosis of renal insufficiency and failure in Black folks experiencing kidney disease, leading to greater morbidity, poorer outcomes, and lower odds for kidney transplantation once end-stage renal failure is diagnosed.[37] This difference is not rooted in some actual difference in the renal physiology of Black patients as compared with others; instead, it is located in racism embedded in the systems and structures of health care and the uninterrogated assumptions of empiricism. So, while quantitative research adds to the scientific literature, the clinical implications are often interpreted through a white-centering lens.

Increasingly, the health sciences are coming (albeit late) to understand race as a social construct. This gives rise to the ability to recognize differences in health associated with race as effects of racism, whether institutionalized, personally mediated, or internalized.[38-41] For example, recent scholarship attributes poor maternal health outcomes among Black women not to some innate difference found among Black women (deficit framing), instead linking it to structural racism, a powerful social determinant of maternal health rooted in historical systems of oppression that dehumanize Black women of color and shape our health care systems today.[35] Therefore, nursing must reckon with the notion that **numbers are not neutral or trustworthy in isolation.**[42] What we see, hear, and touch, for some, can be biased, polarizing, and harmful to others. Although so-called objective assessments (vital signs) are foundational to every clinical nurse, subjective assessment—people in their own words—is central to providing culturally safe care. This care is too often subordinated to empirical approaches. Therefore, nurses can construct new knowledge by picking up clues from culturally diverse people, asking, talking, listening, hopefully mitigating cultural ignorance. Being open to self-critique and reflection while working toward establishing mutually beneficial and high-quality relationships with patients, nurses begin their practice in cultural humility—a move away from the idea that the nurse can become "competent" in another's divergent life experience.[43] Nurses are thus conduits that facilitate meaning for people in their healing processes, wellbecoming, a function that vital signs, laboratory values, and radiologic imaging can never do alone.

A siloed pattern of knowing does not adequately and sufficiently provide the human-to-human connection that we all seek and that is the heart of nursing. Consequently, this dependence on one way of knowing can manifest into nursing care that is culturally alienating.[44] If the body of nursing knowledge intends to serve all culturally diverse patients, advocate for racial justice, and promote health equity, we encourage the discipline to adopt multiple ways of knowing, supported by the mycorrhizal network that is emancipatory knowing. With that, nursing has a chance to provide the care that our patients need and deserve—not a one-size-fits-all approach—but nursing care that is for everyone. As nursing is conventionally taught, ruled by the primacy of empirical modalities, other dimensions of care, other ways of knowing are subsumed, deprioritized, and, sometimes, dismissed.

Moving forward in the COVIDicene will require us to contend with what Chanda Prescod-Weinstein[45] describes as white empiricism. Although addressing physics

specifically, Prescod-Weinstein's ideas are prescient for nursing, an ideology all too often scaffolded around white empiricism and white femininity. She defines white empiricism as the "phenomenon through which only white people (particularly white men) are read has having a fundamental capacity for objectivity and Black people (particularly Black women) are produced as an ontological other."[45(p421)] The impact of white empiricism in nursing discourse creates an enduring system of erasure of socially marginalized epistemologies and, in turn, people. This form of epistemic injustice, the structural missingness of people and knowledge, negatively impacts nursing education and care, stacking additional harms against people who are othered.[46] In the section that follows, we invite readers to consider aesthetic knowing. Aesthetic knowing, an integral part of the nursing process, is a point of entry for cocreating reality, kaleidoscopic in its vision, eroding conventional boundaries around what is nursing and what is not.

AESTHETIC KNOWING: ART AS AN ENQUIRY*

Olafur Eliasson, a Danish-Icelandic artist known for his art installations that combine light, air, water, and temperature, describes that "what we consider truth depends on how you look at it."[47] For the discipline of nursing, our truth is shaped on knowing who we are (knowing what) and how we operate (knowing how). Philosophically, we refer to this as our patterns of knowing, which originally included empirics, aesthetics, personal, and ethical knowing.[2] Other patterns of knowing, such as emancipatory, sociopolitical, and unknowing, have since been described in our discipline.[3,47,48] To date, there has been much debate on the value of one pattern over another, specifically among the patterns of empirics and aesthetics.[49] This essay is guided by the assumption that not one pattern of knowing is of greater value in itself, but that in unity there is strength. Moreover, aesthetic knowing is purported as a way to see the world and can be used as a gateway to change what we deem as "truth," steering the gaze of knowing. To highlight this, the COVID-19 pandemic is emphasized.

The art of nursing, otherwise what we refer to as "aesthetics," is both a process and a product.[49] To enable you to visualize, traditionally, when we think about art we imagine a museum in which there is a painting, such as the famous Mona Lisa. While the Mona Lisa is a product now that lives at the Louvre in Paris, France, it was once a process in which Leonardo Da Vinci painted a woman named Lisa Gherardini.[50] What is important to consider here is the way in which Leonardo Da Vinci painted Lisa Gherardini changed the way in which we see art today. If he had painted her in a different style of art, or simply the angle, would she be still hanging at the Louvre today in regard? If she was not white, or didn't fit the classic Eurocentric ideal of beauty, would art look like it does today? We often fail to acknowledge the subjectivity and social constructions that exist within the process and product of art, similar to the process and product of nursing, that influence how and what we see. Aesthetic knowing is our worldview in action and in itself can be both oppressive and liberatory dependent on how we use it. We must wield our aesthetic knowing as a boundless, open, and constantly evolving tool, enabling us to challenge the status quo and pave alternative ways of seeing truth.

On average, we spend 17 seconds contemplating a piece of art.[51] This enables us to identify an image but prevents us from understanding the details influencing the way you see that image. This is analogous to the way we view, and have practiced, nursing among the COVID-19 pandemic. Our gaze was fixed on surviving ourselves, we can call this our 17-second view, distorting our understanding of the pandemic and of those impacted within. We never took the time to understand the details within our

*Essay author: Chole Littzen

painting of nursing, including those within who have been systematically disadvantaged and oppressed, such as Black, Brown, or Indigenous people in the United States. Thus, we can ask the same questions we did of the Mona Lisa, what would nursing and health care look like today if we had gone beyond our 17-second view of the pandemic? If we had taken a different approach, a different viewpoint, where would we be now?

Aesthetic knowing can be a tool, an act of seeing, and a gateway in which we can use all of our nursing knowledge to face future problems with clarity. If we step back and extend our gaze, aesthetics can help us identify what questions we need to ask, understand what is right and responsible, and recognize our role in the bigger picture. Moreover, the act of seeing enables us to be aware of problems of injustice and inequality, unlearn what is no longer serving us through unknowing, and work toward a more equitable world in an emancipatory fashion. We cannot change the narrative unless we clearly see the picture for what it is, and this includes the subjectivity influencing the narrative. Aesthetics enables us to ask the questions of significance and therefore aesthetic knowing is a gateway in which we truly see ourselves and how we operate and, ultimately—what we deem as truth. This further highlights the interconnections of the patterns of knowing, specifically personal knowing, where through the journey of knowing the self, we can understand our own positionality and reflexivity in the world, enhancing the context of the bigger picture in front of us.

PERSONAL KNOWING AS A PORTAL*

In early April 2020, as it became increasingly clear that the United States (and the world) was facing a pandemic it was ill-prepared to navigate, author and screenplay writer Arundhati Roy published an article, titled "The Pandemic is a Portal," describing the ways in which times of crisis are also times of transformation, of possibility, of reflection. I would like to suggest that, for nursing, the pandemic is also portal that illuminates possibility at the same time it demands introspection, interrogation even, of the ways we as a discipline *and we as individuals* both resist and comply with the ideologies that define our work.[4]

Nursing is relational, predicated on the ability to build trust and rapport quickly. This aspect of nursing work is often naturalized, conflated with the gendered expectations that characterize the discipline. This ease with which nurses build intimacy is part of what obscures the skill and work required to do what we do for those outside the discipline.[52] But there are also instrumental ways in which we operationalize dimensions of our profession without ever deeply interrogating them for ourselves, so this erasure—the naturalization of nursing—is doubled back on itself, making it difficult for us as nurses to see where we have been complicit, benefited from proximity to white patriarchy, policed the discipline for values we have not sufficiently interrogated, upheld violence against one another in the name of a capitalism from which we do not directly benefit.

But this kind of conflation—assuming that there is something, anything, about nursing is that natural or innate—obscures the position from which we nurse, a hegemony that conceals itself through the production of a gendered discourse of nursing. Because nursing is relational, our positionalities and identities are fundamental to how we understand our work, our patients, our communities, our worlds.[2] Personal knowing means understanding that who we are as individuals is articulated by the experiences we have and the structures in which we exist: we are the tip of an ancestral, communal, collective, cultural, professional, filial, educational iceberg.

Personal knowing means also recognizing that our interactions with others are shaped by the same kinds of forces, though their

*Essay author: Jessica Dillard-Wright

manifestation may be different. Philosopher Rosi Braidotti gets at something important when she says, "We-are-(all)-in-this-together but we-are-not-one-and-the-same."[9(p52)] Our positionality and identity shape each and every other dimension of our nursing praxis and nursing knowledge, which means that personal knowing is not simply an academic exercise. Instead, personal knowing is embodied, interconnected, grounded of the earth. Personal knowing is foundational to every other way of knowing that can exist in nursing, the prism that refracts our experiences, engagements, epistemes, evolutions. The portal through which we as individuals make sense of the world. And because of this, we have an ethical imperative to speak truth to power, even when it is scary, confrontational, destabilizing. Getting comfortable in the discomfort.[53] In the time of COVID-19, this means recognizing the uneven unfolding of pandemic consequences, which overburden Black, Indigenous, and Communities of Color in the United States.

Personal knowing is a crucible that shapes our engagement with other patterns of knowing, a reality that contains deep ontological and epistemological implications for this kind of thinking in nursing. And while I link my thoughts here to our pandemic times, I must also clearly and definitively link this meditation to the civil uprising of mid- to late 2020, a fuse lit by the police murder of George Floyd but fueled by 400 years of institutional racism. The robust militarized response to these anti-racist uprisings is a stark contrast to the fetid pandemic response, where nurses were sent to work with COVID-19 patients using trash bags for gowns, recycling single-use PPE, a glaring spotlight on the collusion of patriarchy and white supremacy. But it is critical that we recognize that these faults and fissures are not new or unique to the pandemic, just as we recognize that the racism against which activists are protesting is not simply a couple of "bad apples" in the police force but rather a function of an oppressive regime that must be dismantled and reconfigured.[19]

I leave you with a final thought from Roy's pandemic as portal:

> We can choose to walk through it, dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us. Or we can walk through lightly, with little luggage, ready to imagine another world. And ready to fight for it.[4]

We can build a different future for nursing, for our communities, for our countries, and for our world. And it starts here. Now. With critical self-reflection as a portal to structural change. Personal knowing is a portal too. What will we choose? The portal of personal knowing through critical self-reflection is a gateway to emancipatory potential in nursing. Critical self-reflection and situated knowing of self are fundamental to emancipatory knowing in nursing and are closely linked to Carper's final pattern of knowing, ethical knowing.

ETHICAL KNOWING: THREADS FROM #COVIDicene*

COVID-19 is not an equal opportunity virus, it's a double tragedy for People of Color communities[54]

To contextualize ethical knowing in nursing, I detangle time-space threads of the present whirlwind moment that nurses on the internet labeled COVIDicene.[55] The hashtag COVIDicene appeared in social media images, on Twitter, and in blog posts beginning in early spring 2020, as the events of the COVID-19 pandemic unfolded. The storied realities of the pandemic include layers of ethical crises situated within staggeringly disparate reports of illness and death from COVID-19 in Black, Native American, Latinx, and other Communities of Color. It became clear that the COVIDicene is interwoven with other deadly oppressive processes such as slavery, genocide, colonialism, capitalism, exploitation, structural racism, and white

*Essay author: Jane Hopkins-Walsh

privilege. Included in the entanglement are planetary ruin, worldwide economic collapse and unemployment, and emboldened white supremacy and xenophobia.[56] The texture of COVIDicene is tense and unsettled, like watching a filmstrip, the crises unfurl, the world is uncertain what to expect next.

As these words were typed, more than half a million people are dead of COVID-19 in the United States. In the background, President Trump and his supporters unsuccessfully try to overturn the 2020 election results in what many are calling an unprecedented attempted coup.[57] Other COVIDicene realities: the Trump government methodically dismantle essential environmental legal protections for living and nonliving, reinstated federal executions of prisoners after a 16-year suspension, and reversed essential core civil freedoms.[58,59] The attacks on individual freedoms include pervasive voter suppression and attempted restrictions of voting rights in minority communities, reversing fundamental reproductive rights for women, dismantling the Affordable Care Act, which provides health insurance protections for millions, and reversing school, workplace, and health care protections for the LGBTQI communities in areas of gender identity and sexual orientation.[60]

Although the US constitution contains provision for the right to assemble peaceably, vast inequities surrounding this right to peaceful protest became increasingly unconcealed in the COVIDicene. Inequities include extreme violence and costly felony charges against Indigenous land and water defenders protesting extractive pipeline projects and Black Lives Matter protesters gathering near federal buildings.[61,62] Inequitable contrast: hundreds of armed white supremacist pro-Trump rioters violently stormed the Capitol on January 6, 2021, with stated intent to kill elected officials and walked away freely and unharmed, aided by Capitol police who posed with them for photographs and opened gates for the riotous mob.[63] The scrim of the COVIDicene is mass incarceration, prisons overflowing with too many young and old POC's loved ones, and the "crimmigation," criminalized migration, of asylum-seeking migrant and immigrant people.[64] The result is mass detention and chaotic separation of babies, children, parents, families within dehumanizing privatized prison industrial complexes: all deadly hot spots for COVID-19 infection.

The ethical-epistemological gateway in nursing, like in the COVIDicene, is the understanding that all things touch other things, especially knowledge, including what information we choose to know and not know, remember, and forget.[8] Emancipatory ethical knowing begins by confronting nursing's unequivocal history of colonialism and privileged nonknowing, including nursing's complicity in white-centered feminism, prejudice, exclusion, discrimination and overt institutionalized racism within the profession, and the silencing and policing of counter-narratives.[65-67] It matters what stories tell stories, whose stories are told, and who does the telling.[8]

COVIDicene is a posthuman embodiment of entangled threads connecting thoughts, people, materialist realities, and inequities during COVID-19 quarantine: a time of unprecedented social isolation, where all of New York City was "**CLOSED UNTIL FURTHER NOTICE!!!**"[54] We saw decreased carbon emissions and, abruptly, atmospheric ozone holes sealed. Under pandemic lockdown in April 2020, historically poor air quality Los Angeles boasted blue, pollution-free skies, replete with birds singing loud sans competition from human ruckus, unveiling deep interconnectedness between our planet's human and nonhuman forms.

From the COVIDicene arose creative expressions of human knowledge making from artists and scholars, musicians, DJs, nurse bloggers, protesters, journalists, and storytellers—decrying ethical injustice of institutionalized racism, deadly police brutality, and anti-Black hatred by systems, citizens, neighbors. COVIDicene is viral videos of killings so shockingly violent they rattle the collective human conscience. More stories

that tell stories of state-sanctioned, racialized murders of Black people by police and lynching by neighborhood vigilantes: Ahmaud Aubrey jogging near his new home; George Floyd walking in the street outside a cafe, Breonna Taylor sleeping at home in bed, Rayshad Brooks dozing at a Wendy's drive-in window; Jacob Blake shot 7 times in the back at point-blank range in front of his children. A scant sampling of far too many Black lives lost to racialized violence over the past few months and over the course of 400 plus years of anti-Blackness in this nation.[68,69] COVIDicene is a tsunami of multiracial multigenerational bipartisan uprising despite pandemic quarantines.[70] Black Lives Matter protests transformed into a planet-wide movement against racial injustice and oppression.[71] Colonialist statues and monuments honoring owners of enslaved people burn and topple in public squares around the world; sports teams agree to remove racist mascots and branding.[72] Stories that tell stories, things that touch things[8]: all of COVIDicene is interconnected.

Filamentous rhizomatic COVIDicene thinking reframes Carpers' ethical and other knowing in nursing, about what and how we choose to know or to erase, selectively defining the complexity and diversity of knowledge we hold close to us as valuable for the discipline of nursing.[2,24] On the topic of ethics, Twitter user @DataSciBae reminds us that "People in dominant groups (male, white, cishet, able-bodied) DO NOT get to decide what is fair for historically oppressed groups."[73] The idea positions patterns of ethical and all ways of knowing by a historically white cisfemale profession like nursing for immediate critique and prolonged self-reflection. It **matters** whose stories tell stories.[8]

I propose these patterns for reimagined rhizomatic COVIDicene nursing knowing: ethical-aesthetic-empirical-personal-sociopolitical-emancipatory-planetary-ecological-anti-racist-anticolonial-anti-oppression-queer-anticapitatlist-multispecies-prodisabled-cybernetic.[2,14,74] Hopefully, the list will continue to compost, morph, and sprout outward to create new tools for thinking and doing the radical work of nursing. Ethical knowing is not abstract or intangible. Instead, ethical knowing is embodied in flesh and rhizomatically entangled with all frameworks of knowing arising from disruptive theories, Black-Queer-Trans-Indigenous feminism, anti-capitalist anti-racist thinking, and critical and historical analyses of power and oppression. Importantly, ethical knowing must be tangibly related to praxis for solutions to social injustice.[75] Emancipatory suggestions for how nurses can apply ethics include "first, listen to those who for centuries have been telling us the answers; second, believe them; finally, act from their direction."[76(894)] Posthuman ideas about ethical and other knowing in nursing decenter binaries between the living and nonliving and are entwined, flattened, nonhierarchical, rhizomatic like threads of #COVIDicene.[77]

The reframing of ways of knowing allows nurses to ac-*know*-ledge that societal systems including nursing, health care, medical care, policing, education, organized sports, criminal and civil law, housing, politics, and banking are all deeply flawed; founded on laws and norms built on systemic racism, capitalism, and white privilege—well before the pandemic began. Any suggestion to "return" to prepandemic conventions does not serve or advance humanity. As nurses we must imagine and build new paths. These broken systems must be dismantled, left behind, and rebuilt accordingly to include radically revisioned ways of knowing, being, theorizing, doing.

This leaves us with this stark reminder from a public health community-based art campaign: *SOCIAL STUDIES 101 A CARRIE MAE WEEMS PROJECT RESIST COVID/TAKE 6!*

COVID-19 IS NOT A HOAX: It's an ecological health crisis of epic proportion—an international disaster. And yet we have indisputable evidence that People of Color have been disproportionately impacted. The death tolls in these communities are staggering. This fact affords the nation an unprecedented opportunity to address the impact of

social and economic inequality in real-time. *Denial does not solve a problem*.[54]

From here, we leave you with our final provocations, questions to link our patterns of knowing to future possibilities, to more just futures, to nursing justice.

CONCLUSION: ACTIVATING AN IMAGINATION FOR NURSING

We've learned that quiet isn't always peace And the norms and notions of what just is Isn't always justice.

The Hill We Climb, inaugural poem by Amanda Gorman[78]

What Barbara Carper bequeathed to us was a schema for thinking about the arrayed and interlocking patterns of knowledge we as nurses use to untangle the ways in which we practice nursing. It is our belief that although Dr Carper proposed our disciplinary ways of knowing in a siloed manner, she never intended us to believe they acted in isolation. Chinn and Kramer[3] have made similar commentary. We embrace this kind of emancipatory approach, inspired, in part, not only by Chinn and Kramer but also by liberation-minded scholar-activists like Paulo Freire, Angela Davis, bell hooks, Ruha Benjamin, Cherie Moraga, Audre Lorde, Vine Deloria Jr, Gloria Anzaldúa, and so many more. Building on their work, using tools they crafted, here we use the backdrop of the COVID-19 pandemic to demonstrate that all patterns of knowing are rhizomatic: scaffolded, grounded, and muddled together, ignited to its full anti-racist and liberatory potential through emancipatory knowing.

The patterns of knowing as we have sketched them are interconnected, webbed together like a rhizomatic network of mycelium that connect, interact, and react with each other continuously. An original watercolor painting (Figure 1) depicts the multiple gifts and possibilities found within multiple ways of meaning and knowledge making. Both unitary and discrete, like the communities and people for whom nurses care and of whom nurses are a part, the art-science of the nursing present-future is a tangled snarl of roots, messy and fruitful. Here, no one pattern of knowing wins out over any other, constructing nonhierarchical equity for what is accepted as valid and important in nursing knowledge. Here, we also recognize that some situations will render some patterns of knowing better suited to answering questions, teasing out insight the other patterns leave subsumed. This leaves us with both/and rather than a reductive either/or in the kinship of our nursing knowledge. Ultimately, this challenges the primacy of empirics, which has historical and contemporary groundings in the biases of white supremacy and racism. This ungrounding can be seen as the symbiotic need for cocreation through human interaction, signaling the potential for liberation, for undoing oppression, for dismantling violence, for abolishing racism implicit in other patterns of knowing. We cannot achieve greatness alone, one pattern of knowing to rule all; we need each

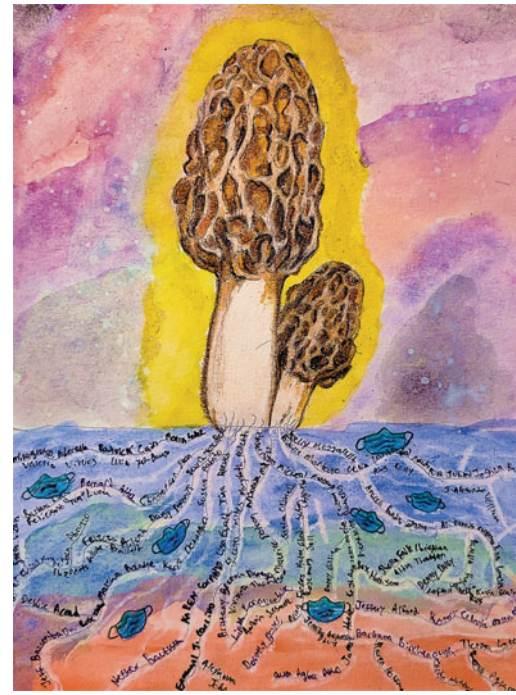

Figure 1. Morel mushrooms, COVID-19, and anamnesis. Illustration by Brandon Blaine Brown. Used with permission. This figure is available in color online (www.advancesinnursingscience.com).

other no matter the setting. With rhizomatic and collaborative work, we increase the synapses of knowledge between us, fostering epistemic diversity through many patterns of knowing. Together, each pattern of knowing provides a light with which we can see the world clearly and mitigate the weaknesses that if used in silo would leave us in the dark.

Imagining post-COVIDicene futures means understanding the world as it is, with all ways of knowing in wholesome balance. From there, we can adopt, adapt, cocreate, and deconstruct ways of knowing, doing, being, relating, and existing that disrupt enshrined hegemonies. This means interrogating the toxic and oppressive power regimes and ideologies that have a stranglehold on the discipline of nursing, a microcosm of society, and examine how these forces contribute harm to the communities and individuals we accompany and to nurses themselves. These emancipatory actions mean letting go of uncritically received wisdom, centering Blackness and Indigeneity, specifically Black and Indigenous women who are disproportionately harmed, and embracing all gender, sexual, abled, and neurodiversity. We propose a vision for nursing knowledge that raises messy and uncomfortable questions, disrupts enshrined ways of thinking, and excavates the vision of justice and equity for people, their families, and communities.

We cannot accomplish these lofty aims alone and we are captivated by the possibilities. Here, we invite you to actively engage with the ideas and explanations and patterns that structure your daily praxes as nurses, no matter the setting. Interrogate the assumptions that come with a realist approach to empiricism. Soak in the beauty and terror aesthetics can bring. Engage in deep critical self-reflection that can precipitate liberatory personal knowing. Consider what all this means for your approach to ethical knowing. In the spirit of imagination and continuing the conversation, we invite you to join us. Share what comments, critiques, and commitments arise as you read this article by using the QR code in Figure 2—let's build a brainstorm together. Connect with your coconspirators, friends, colleagues, allies and discuss the following questions, drawn from the blog newsletter *ANTI-RACISM DAILY*: "(1) What did you uncover here that you never heard of before? (2) What power and privilege may have protected you from unpacking that concept? and (3) What traumas may have shielded you from learning more?"[79] Finally, we ask you to consider: Where could nursing go, once we unpack these ideas? What could nursing be, if it chose?

Figure 2. QR code with link to collaborative mind map. Use your phone's camera to open a link to Padlet. Alternatively, use this web address: tinyurl.com/1v36ei8d. In Padlet, use the pink plus sign to add to our ever-expanding network. Entries are anonymous and will be moderated.

REFERENCES

1. Coggins N, Dawson J, Dolechek M, Concepción Fosado G. An antiracist framework for scholarly publishing. *The Scholarly Kitchen*. August 6, 2020. Accessed September 15, 2020. https://scholarlykitchen.sspnet.org/2020/08/06/guest-post-an-antiracist-framework-for-scholarly-publishing
2. Carper B. Fundamental patterns of knowing in nursing. *ANS Adv Nurs Sci*. 1978;1(1):13-24. doi:10.1097/00012272-197810000-00004
3. Chinn P, Kramer M. *Knowledge Development in Nursing: Theory and Process*. 10th ed. Elsevier; 2018.

4. Roy A. The pandemic is a portal. Published April 3, 2020. Accessed May 28, 2020. https://www.ft.com/content/10d8f5e8-74eb-11ea-95fe-fcd274e920ca
5. Willis DG, Grace PJ, Roy C. A central unifying focus for the discipline: facilitating humanization, meaning, choice, quality of life, and healing in living and dying. *ANS Adv Nurs Sci*. 2008;31(1):E28-E40. doi:10.1097/01.ANS.0000311534.04059.d9
6. Crutzen PJ. The "Anthropocene." In: Ehlers E, Krafft T, eds. *Earth System Science in the Anthropocene*. Springer; 2006:13-18. doi:10.1007/3-540-26590-2_3
7. Yusoff K. *A Billion Black Anthropocenes or None*. University of Minnesota Press; 2018.
8. Haraway DJ. *Staying With the Trouble: Making Kin in the Chthulucene*. Duke University Press; 2016.
9. Braidotti R. *Posthuman Knowledge*. Polity Press; 2019.
10. Barad K. Posthumanist performativity: toward an understanding of how matter comes to matter. In: Åsberg C, Braidotti R, eds. *A Feminist Companion to the Posthumanities*. Springer; 2018:223-239. doi:10.1007/978-3-319-62140-1_19
11. Vilarosa L. A terrible place: the deadly racial disparities of COVID-19 in America. *The New York Times*. Published April 29, 2019. https://www.nytimes.com/2020/04/29/magazine/racial-disparities-covid-19.html
12. Littzen COR, Langley CA, Grant CA. The prismatic midparadigm of nursing. *Nurs Sci Q*. 2020;33(1):41-45. doi:10.1177/0894318419881806
13. Thorne S. Nursing as social justice: a case for emancipatory disciplinary theorizing. In: Kagan P, Smith M, Chinn PL, eds. *Philosophies and Practices of Emancipatory Nursing*. Routledge; 2014:70-90.
14. Dillard-Wright J, Walsh JH, Brown BB. We have never been nurses: nursing in the Anthropocene, undoing the Capitalocene. *ANS Adv Nurs Sci*. 2020;43(2):132-146. doi:10.1097/ANS.0000000000000313
15. Thorne S. Rethinking Carper's personal knowing for 21st century nursing. *Nurs Philos*. 2020;21(4):e12307. doi:10.1111/nup.12307
16. Tobbell DA. Nursing's boundary work: theory development and the making of nursing science, ca. 1950-1980. *Nurs Res*. 2018;67(2):63-73. doi:10.1097/NNR.0000000000000251
17. McGibbon E, Mulaudzi FM, Didham P, Barton S, Sochan A. Toward decolonizing nursing: the colonization of nursing and strategies for increasing the counter-narrative. *Nurs Inq*. 2014;21(3):179-191. doi:10.1111/nin.12042
18. Vizenor GR, ed. *Survivance: Narratives of Native Presence*. University of Nebraska Press; 2008.
19. Benjamin R. *Black Skin, White Masks: Racism, Vulnerability, and Refuting Black Pathology*. Department of African American Studies; 2020. Accessed May 28, 2020. https://aas.princeton.edu/news/black-skin-white-masks-racism-vulnerability-refuting-black-pathology
20. Reed PG. A philosophy of nursing science and practice: intermodernism. In: *Nursing Knowledge and Theory Innovation: Advancing the Science of Practice*. 2nd ed. Springer; 2018:21-46.
21. Deleuze G. Postscript on the societies of control. *October*. 1992;59:3-7.
22. Reed PG. Epistemic authority in nursing practice vs. doctors' orders. *Nurs Sci Q*. 2016;29(3):241-246. doi:10.1177/0894318416647356
23. Kimmerer RW. *Braiding Sweetgrass*. 1st ed. Milkweed Editions; 2013.
24. Deleuze G, Guattari F. *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press; 2007.
25. Tuck E, Yang KW. Unbecoming claims: pedagogies of refusal in qualitative research. *Qual Inq*. 2014;20(6):811-818. doi:10.1177/1077800414530265
26. Wilson S. *Research Is Ceremony: Indigenous Research Methods*. Fernwood Publishing; 2008.
27. Rogers BL. *Developing Nursing Knowledge: Philosophical Traditions and Influences*. Lippincott Williams & Wilkins; 2005.
28. Kranzberg M. Technology and history: "Kranzberg's laws." *Technol Cult*. 1986;27(3):544-560. doi:10.2307/3105385
29. Sjoding MW, Dickson RP, Iwashyna TJ, Gay SE, Valley TS. Racial bias in pulse oximetry measurement. *N Engl J Med*. 2020;383(25):2477-2478. doi:10.1056/NEJMc2029240
30. Centers for Disease Control and Prevention. *What Do You Do if You Are Sick*. Centers for Disease Control and Prevention; 2021.
31. Benjamin R. *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity; 2019.
32. Cooper R, David R. The biological concept of race and its application to public health and epidemiology. *J Health Polit Policy Law*. 1986;11(1):97-116. doi:10.1215/03616878-11-1-97
33. Cavalli-Sforza LL, Menozzi P, Piazza A. *The History and Geographic of Human Genes*. Princeton University Press; 1994.
34. Williams DR. Race and health: basic questions, emerging directions. *Ann Epidemiol*. 1997;7(5):322-333. doi:10.1016/s1047-2797(97)00051-3
35. Taylor JK. Structural racism and maternal health among Black women. *J Law Med Ethics*. 2020;48(3):506-517. doi:10.1177/1073110520958875
36. Artiga S, Pham O, Orgera K, Ranji U. *Racial Disparities in Maternal and Infant Health: An Overview*. Kaiser Family Foundation; 2020. Accessed May 6, 2021. https://www.kff.org/report-section/racial-disparities-in-maternal-and-infant-health-an-overview-issue-brief/
37. Roberts DE. Abolish race correction. *Lancet*. 2021;397(10268):17-18. doi:10.1016/S0140-6736(20)32716-1

38. Dennis RM. Social Darwinism, scientific racism, and the metaphysics of race. *J Negro Educ*. 1995;64(3):243. doi:10.2307/2967206
39. Jones CP. Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health*. 2000;90(8):1212-1215. doi:10.2105/ajph.90.8.1212
40. Roberts D. *Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century*. The New Press; 2012.
41. Zuberi T. *Thicker Than Blood: How Racial Statistics Lie*. University of Minnesota Press; 2001.
42. Crawford CE, Demack S, Gillborn D, Warmington P. Quants and crits: using numbers for social justice (or, how not to be lied to with statistics). In: *Understanding Critical Race Research Methods and Methodologies: Lessons From the Field*. Routldege; 2019:125-137.
43. Soule I. Cultural humility. In: *Integrative Health Overview of Nursing Interventions for Vulnerable Populations*. Springer International Publishing; 2021:1-10.
44. Vo T. Cultural alienation: a concept analysis. *Nurs Forum*. 2021;56(1):160-171. doi:10.1111/nuf.12512
45. Prescod-Weinstein C. Making Black women scientists under white empiricism: the racialization of epistemology in physics. *Signs J Women Cult Soc*. 2020;45(2):421-447. doi:10.1086/704991
46. Hopkins Walsh J, Dillard-Wright J. The case for "structural missingness": a critical discourse of missed care. *Nurs Philos*. 2020;21(1):1-12. doi:10.1111/nup.12279
47. Munhall PL. "Unknowing": toward another pattern of knowing in nursing. *Nurs Outlook*. 1993;31(3):125-128.
48. White J. Patterns of knowing: review, critique, and update. *ANS Adv Nurs Sci*. 1995;17(4):73-86. doi:10.1097/00012272-199506000-00007
49. Henry D. Rediscovering the art of nursing to enhance nursing practice. *Nurs Sci Q*. 2017;31(1):47-54. doi:10.1177/0894318417741117
50. Scailliérez C. *Mona Lisa—Portrait of Lisa Gherandini, Wife of Francesco del Giocondo*. Louvre. Accessed April 16, 2020. https://www.louvre.fr/en/oeuvre-notices/mona-lisa-portrait-lisa-gherardini-wife-francesco-del-giocondo
51. The Toledo Museum of Art. The art of seeing art. Published 2019. Accessed April 1, 2020. https://www.toledomuseum.org/education/visual-literacy/art-seeing-art
52. Ruchti L. *Catheters, Slurs, and Pickup Lines: Professional Intimacy in Hospital Nursing*. Temple University Press; 2012.
53. Perron A, Rudge T, Gagnon M. Towards an "ethics of discomfort" in nursing: parrhesia as fearless speech. In: Kagan P, Smith M, Chinn P, eds. *Philosophies and Practices of Emancipatory Nursing: Social Justice as Praxis*. Routledge Studies in Health and Social Welfare, Routledge; 2014:39-50.
54. Weems CM. *SOCIAL STUDIES 101 A CARRIE MAE WEEMS PROJECT RESIST COVID/TAKE 6*! Resistcovidtake6.Org. Published 2020. Accessed March 8, 2020. http://socialstudiesproject.org
55. Gamble R. Dispatch from the Covidicene era. *Solstice A Magazine of Diverse Voices*. March 2020. Accessed April 1, 2020. https://solsticelitmag.org/blog/dispatch-from-the-covidicene-era
56. Boyd RW, Krieger N, Jones CP. In the 2020 US election, we can choose a just future. *Lancet*. 2020;396(10260):1377-1380. doi:10.1016/S0140-6736(20)32140-1
57. Suk Gerson J. Trump's coup attempt isn't over. *New Yorker*. December 15, 2020. Accessed December 17, 2020. https://www.newyorker.com/news/our-columnists/trumps-coup-attempt-isnt-over
58. Popovich N, Livia Albeck-Ripka, Pierre-Louis K. The Trump Administration is reversing more than 100 environmental rules. Here's the full list. *The New York Times*. November 10, 2020. Accessed November 11, 2020. https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html
59. Schwartz M. Federal executions set to resume after nearly 2-decade hiatus. *NPR News*. June 15, 2020. Accessed July 5, 2020. https://www.npr.org/2020/06/15/877748845/federal-executions-set-to-resume-after-nearly-two-decade-hiatus
60. Goelzhauser G, Konisky DM. The State of American Federalism 2019-2020: polarized and punitive intergovernmental relations. *Publius J Fed*. 2020;50(3):311-343. doi:10.1093/publius/pjaa021
61. Office High Commissioner Human Rights. Criminalization of human rights defenders of Indigenous peoples resisting extractive industries in the United States report to the Inter-American Commission on Human Rights Prepared by the University of Arizona Rogers College of Law, Indigenous Peoples Law and Policy Program on behalf of the Water Protector Legal Collective. Published January 26, 2018. Accessed December 11, 2020. https://www.ohchr.org/Documents/Countries/LAC/HRDAmericas/Universitiy_of_Arizona_IP_Law_Policy_Program.pdf
62. Gabbatt A. Felony charges against BLM protesters are "suppression tactic", experts say. *The Guardian*. Published August 16, 2020. Accessed August 26, 2020. https://www.theguardian.com/world/2020/aug/16/felony-charges-blm-protesters-suppression-tactic
63. Obasi C. What happened at the Capitol shows white privilege in plain view. The disparity in police treatment of the Capitol supporters vs the BLM protesters wasn't just blatant; it was Black and white. Published January 7, 2021. Accessed January 8, 2021. https://www.harpersbazaar.com/uk/culture/a35148638/what-happened-at-capitol-shows-white-privilege
64. Koulish R, van der Woude M, eds. *Crimmigrant Nations: Resurgent Nationalism and the Closing of Borders*. 1st ed. Fordham University Press; 2020. doi:10.2307/j.ctvxrpzhz

65. Barbee EL. Racism in U. S. nursing. *Med Anthropol Q*. 1993;7(4):346-362.
66. Hine DC. *Black Women in white: Racial Conflict and Cooperation in the Nursing Profession, 1890-1950*. Indiana University Press; 1989.
67. Waite R, Nardi D. Nursing colonialism in America: implications for nursing leadership. *J Prof Nurs*. 2019;35(1):18-25. doi:10.1016/j.profnurs.2017.12.013
68. Armstrong M. From lynching to Central Park Karen: how white women weaponize white womanhood? *Hastings Womens Law J*. 2021;32(1):27-50.
69. Kelly S, Jeremie-Brink G, Chambers AL, Smith-Bynum MA. The Black Lives Matter movement: a call to action for couple and family therapists. *Fam Process*. 2020;59(4):1374-1388. doi:10.1111/famp.12614
70. Jeffries JL, Beckham J. Multiethnic uprisings in urban America and their implications for progress. *J Afr Am Stud (New Brunsw)*. Published online January 9, 2021. doi:10.1007/s12111-020-09508-0
71. Taylor A. Images from a worldwide protest movement. *The Atlantic*. June 8, 2020. Accessed June 15, 2020. https://www.theatlantic.com/photo/2020/06/images-worldwide-protest-movement/612811/?utm_source=twitter&utm_medium=social&utm_campaign=share
72. Acaroglu O, Acaroglu O. Toppling statues as an act of historical redemption. *ROAR Magazine Race and Resistance*. July 13, 2020. Accessed July 20, 2020. https://roarmag.org/essays/toppling-statues-as-an-act-of-historical-redemption
73. @DataSciBae. Hey folks! If you're new here, you should know that white people don't get to be gatekeepers of ethics. People in dominant groups (male, white, cishet, able-bodied) DO NOT get to decide what is fair for historically oppressed groups. Thanks for coming to my Ted talk. Posted December 9, 2020. Accessed December 10, 2020. https://twitter.com/DataSciBae/status/1336855269469372417?s=20
74. Caxaj CS, Berman H. Anti-colonial pedagogy and praxis: unraveling dilemmas and dichotomies. In: *Philosophy and Practices of Emancipatory Nursing: Social Justice as Practice*. Routledge; 2014:175-187.
75. Grace PJ, ed. *Nursing Ethics and Professional Responsibility in Advanced Practice*. 3rd ed. Jones & Bartlett Learning; 2018.
76. Rabelais E, Walker RK. Ethics, health disparities, and discourses in oncology nursing's research: if we know the problems, why are we asking the wrong questions? *J Clin Nurs*. 2021;30(5/6):892-899. doi:10.1111/jocn.15569
77. Whyte KP, Cuomo C, Gardiner SM, Thompson A, eds. *Ethics of Caring in Environmental Ethics*. Vol 1. Oxford University Press; 2016. doi:10.1093/oxfordhb/9780199941339.013.22
78. Gorman A. READ: youth poet laureate Amanda Gorman's inaugural poem. *CNN Politics*. Published January 10, 2021. Accessed January 20, 2021. https://www.cnn.com/2021/01/20/politics/amanda-gorman-inaugural-poem-transcript/index.html
79. Cardoza N. Study hall: whiteness isn't it. *ANTI-RACISM DAILY*. Published February 6, 2021. Accessed February 8, 2021. https://www.antiracismdaily.com/archives?tag=education