



## Sensing Someone Else's Pain: Ethical Historical Traces of Disciplined Interactions in Medical Care

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**Abstract:** This paper highlights the ethical and moral dimensions of relational work and dignity in technoscientific spaces which are elusive in normative disciplinary practices. Using the lenses of ethical perceptions and embodied actions, we locate how microinteractions within physician-patient interactions during pain diagnosis and care are intertwined with interpersonal dignity, racialized emotions and historicized violence on Indigenous people. We discuss the implications of our work in light of dismantling normative views of disciplinary authenticity that underlie technoscience education.

### Introduction

Building on critiques of ethically neutral, ahistorical and apolitical positionings of science education (Bang et al., 2014) and disciplinary authenticity in technoscientific disciplines (Philip & Sengupta, 2021), we offer an empirical critique of professional expertise in medicine that excludes or undervalues the moral and ethical dimensions of relational work (Ducey, 2009; Ducey et al., 2020). Our work arises from the concern that professional work in technoscience is deeply intertwined with historical and ongoing enactments of militarism, nationalism, imperial and colonial violence (Banerjee, 2022; Benjamin, 2019; Sanyal & Sengupta, 2022), which also shapes educational research and praxis in STEM disciplines (Philip & Sengupta, 2021; Takeuchi et al., 2020). This paper advances scholarship on the relationship between the colonial matrix of power that shapes discipline (Mignolo, 2009) and moral and ethical dimensions of experience (Espinoza et al., 2020; Sengupta et al., 2022) that are often invisibilized in the professional practice of medicine. We report findings from an ongoing study of physicians' and caregivers' experiences of the relationship between medical care, technologies and pain. We illustrate: (a) how the misrecognition of pain within a physician-patient interaction is rooted in historical traces of Indigenous erasure and intergenerational trauma in disciplinary spaces; and (b) how a Métis physician, Dr. Campbell (pseudonym), the protagonist in our study, offers a possible re-orientation of disciplined interactions involved in sensing patients' pain through foregrounding ethical, relational and emotional work, based on her experiences of working with Indigenous patients.

### Theoretical Background and Framework

Our work builds on the growing body of scholarship in the social and the learning sciences on the intertwined nature of moral and epistemological dimensions in technoscientific disciplines. Vossoughi et al. (2021) introduced the notion of ethical perception as educators' and researchers' "growing awareness of the pedagogical and ethical saliency of their own embodied actions" (p.137). They argued that embodied actions are "public expressions with political and ethical content (p.138), and urged us to reframe micro-interactions in disciplinary spaces through the lenses of dignity and meaningful participation (Espinoza et al. 2020; Tuck, 2011). In this paper, we adopt this lens of ethical perception to illustrate how embodied actions that represent *disciplined* ways of knowing (Sengupta et al., 2022) can invoke racialized emotions (Bonilla-Silva, 2019) for Indigenous and marginalized people of color who have endured a history of disciplinary violence in the context of medicine. These interactions are fundamentally moral and ethical in nature, which are not afforded in technical-rational views of disciplinary authenticity in technoscience (Philip & Sengupta, 2021; Sengupta et al., 2022). This is particularly important given that medical sociologists have also identified moral dimensions of care as often missing in accounts of professional expertise in medicine, particularly in contexts that involve the relationship of pain, harm and the use of new technologies (Ducey et al., 2020). Examining the wide uptake of transvaginal mesh, a surgical device procedure to treat certain pelvic floor disorders in women that resulted in extensive patient harm, medical sociologists have positioned "mindlines" as the collective moral-epistemological "ways of knowing and acting responsibly" (Ducey et al., 2020) that organize medical practice but often remain as ethical undertones in the technoscientific disciplinary practices that are centered in medicine. While initially, patients' bodies were framed as sites of problems that surgery must correct or improve, over time, patients' voices were centered in ways that enframed the medical practices around vaginal meshes in progressively more moral ways. And yet, as Ducey et al. (2020) noted, moral ambiguities continue to undergird medical expertise in this domain. We foreground feelings of responsibility and rightness as disciplined, and offer a fine-grained analysis of how these disciplined



feelings inform acts of providing care—acts that are embodied and located in relation to specific histories, spaces, and technologies. Surfacing the *moral undertones* (Ducey et al., 2020) of medical carework is also important especially given the history between knowledge creation in Western medicine and violent, forced medical experiments on Indigenous peoples (Lux, 2016; Mosby & Swidrovich, 2021). As our analysis will show, such histories of disciplinary violence leave durable traces on micro-interactions between physicians and Indigenous patients, positioning *disciplined* interactions as inevitably grounded in histories of racial violence enacted by Western technoscience, thus making them ethical, historical and relational, not merely interpretive.

## Methods

We report from an ongoing, interview-based study of physicians' experiences of the relationship between bodies, medical technologies and pain. Participants (n=7 and growing) are recruited both through snowball and targeted sampling, and then interviewed. We present here a single case of Dr. Campbell, a self-identified Métis physician of pain sharing her perspectives and experiences, particularly in the context of interacting with Indigenous patients. We utilize the constant comparative method (Charmaz, 2006) to identify examples of ethical perception (Vossoughi et al. 2021) in the participant's accounts. Our analysis involved coding the interview transcript to identify how she framed and oriented her medical diagnosis as being both grounded in disciplinary practices and ethical-historical. Our analysis centers how gestures, postures and language use in physician-patient interactions creates ethical-historical traces in the patients' clinical experiences.

## Findings

### Theme 1: Ethical-historical traces in physician-patient interactions

In this vignette, Dr. Campbell centers the elusive ethical dimension of professional practice to recognize interpersonal dignity and trauma, as she narrates the case of an Indigenous woman who suffered for a long time from an underdiagnosed case of rheumatoid arthritis. But her pain, as we will see in this case, is not merely a matter of being diagnosed in the moment, rather it is deeply connected with the history of disciplinary violence of Western medicine on Indigenous bodies (e.g., see Lawrence, 2000; Lux, 2016). Dr. Campbell learned that the patient felt traumatized every time her previous doctor, a white male person, turned his back towards her to draw up a syringe during a clinical procedure, evoking painful memories of the violent use of Indigenous bodies for medical experimentation. To the patient, the posture of the doctor represented a hidden view of Western medicine and a lack of acknowledgement of the patient's dignity from a historical perspective, thus hindering medical care. The apparently simple act of turning away is thus morally and historically salient. She further added:

“When I started hearing that, I realized, like, wow, I have to be so transparent. I have to do everything in front of her. I have to explain everything. It'll probably take several visits for us to get [from] this scared point of being [to be able] to move ahead because she's just been traumatized by these prior experiences with this rheumatologist [...] And I can totally see it from her perspective. Like it's a very rushed, it's very, you know, not really genuine and wanting to get to know people. Lots of transactional medicine. Right? So I saw it from that perspective and realized that if I was going to be able to sort of reach her and help her, then I would have to be really very patient, very slow with proceeding very, very transparent and clear about what we were doing and what was being done.”

In a more general sense, Dr. Campbell also noted in the above excerpt that it is important to be open to the patient about what the possible outcomes and effects of the intended procedures that might result from any diagnosis. But the ethical dimensions of the clarity of such communication is multi-faceted: it requires explaining what the diagnosis means or can mean to the patient, both in terms of the anxieties that the patient might experience as well as the benefits of the proposed treatment. For example, she noted that the previous physician could have engaged differently with the patient if he could have “actually balance[d] what are the benefits of this decision or benefits of this treatment or benefits of whatever [the doctor has decided] to do [with] this injection, with the risks.” Even apparently simple and commonplace medical procedures such as injections may be difficult experiences for patients, as Dr. Campbell noted that patients themselves often find needles to be “intimidating” and “invasive.” The physician-patient discussion of why a procedure like this may be useful should be dialogical, rather than authoritative, in which the patient needs to be presented with the benefits of the treatment while also acknowledging the perceptions of fear and apprehension on their part. Dr. Campbell also recognized the historically situated nature of this interaction, noting that for the patient, the syringe as held by the physician was interpreted as a marker of colonial violence. The syringe, held by the physician while turned away from the



patient, does not communicate transparency of the physician's intention to the patient. On the contrary, this produces anxiety for the patient because it is consistent with other forms of racialized experiences of Indigenous people in clinical spaces, both historically and on an ongoing basis. Dr. Campbell noted that the details of treatment, including medical tools, technologies, diagnosis and benefits of the proposed care are often not disclosed to Indigenous patients. She also noted that much of the relational and ethical aspects of physician-patient interactions are missing in clinical interactions because of the rushed nature of visits. For example, many Indigenous patients have shared with her that during examinations of joint pain, they felt that their joints were squeezed, "like, really roughly", and that they were prodded and poked "in different places" while not being afforded the dignity of clinical privacy. Offering another example, she noted that during the diagnosis of certain forms of arthritis that get activated by sexually transmitted infections, Indigenous patients were indelicately and invasively asked about their sexual lives, without providing any explanation for the pursued nature of questioning. Their accounts were also doubted by the physicians, and they would often be admonished for their lifestyle and social practices in racially offensive language: "Why are all of your people like this? Why don't you just get over it?" The use of such disdainful stereotypes in professional conversations reproduces feelings of being unwanted and unwelcomed at clinics. Dr. Campbell felt that clinics typically lack a deep understanding of what it means to live in an Indigenous community, which subsequently leads to a lack of care.

Thus, the overall picture that emerges from Dr. Campbell's interview is one where micro-interactions between physicians and Indigenous patients are sites of a historical present, where normative, *disciplined* (Sengupta et al., 2022) interactions may (inadvertently) further reify marginalization and historical trauma for the patients. The intertwined nature of expressions of pain with trauma and fear rooted in histories of medical violence on Indigenous patients in such contexts can also be understood as racialized emotions (Bonilla-Silva, 2019). How can such micro-interactions be oriented ethically and historically in disciplinary spaces? We offer such an illustration in the next theme.

## Theme 2: Disciplined sensing as multi-temporal and multi-perspectival "weaving"

This theme focuses Dr. Campbell's metaphor of "weaving" that is rooted in an ethical and historical approach toward caring for patients during a diagnosis. Dr. Campbell explained weaving as an intertwining of various forms of observations and interactions, such as tactile examination of relevant parts of the patient's body, a mix of clinical procedures and tests, and the patient's verbal recounting of their lived and historical experiences. In the diagnosis of arthritic pain, perceiving a patient's condition can occur through sensory probing, technological sensing, and routine diagnostic examinations. For example, she uses both hands to palpate around each joint to feel the skin, bone and the gap between bones to assess the nature of inflammation or accumulation of fluids in joints. Dr. Campbell, thus, is careful to "never put all of [the] weight in that inflammatory marker" to decide upon the diagnosis, rather constructs the diagnosis as "a combination of [the physical] exam, the history and the labs." We have already seen the multi-temporal nature of moments of physician-patient interactions in the previous theme; the point here is that an apparently in-the-moment touch also needs to be reframed in light of histories of disciplinary hegemony and violence on Indigenous and marginalized peoples. A rough and unconsented palpation of an inflamed joint can simply recreate a historical trauma for Indigenous patients.

Weaving is also an essential interweaving of perspectives. Along one dimension, physicians sense through their disciplinarily grounded perception (e.g., seeing the inflammation, palpating the joint) and interpretation (e.g., interpreting medical reports, patients' life histories, etc.). The discipline, as Dr. Campbell noted, is historically present in such moments in the sense that she can "tease out" the diagnosis "based on the patterns that people have observed for... hundreds of years with arthritis" through interactions with a patient. However, along another historically oriented dimension, disciplines are often enacted oppressively on endarkened bodies (Philip & Sengupta, 2021). An ethical-historical re-orientation of disciplinary practices, as evident in Dr. Campbell's words, necessitates acknowledging and interweaving both these historical perspectives. Dr. Campbell noted that it is through such perspectival synthesis that a physician can "... get at what's the real situation with their disease", as the patient could be experiencing "psychosocial pain... emotional pain and intergenerational trauma". Thus, even an apparently simple act of touching a patient necessitates perspectival heterogeneity, because as Dr. Campbell noted, it is conjoined with "historical pieces of how patients are functioning".

## Reflective Summary

To summarize, in this paper, we have highlighted interpersonal dignity, racialized emotions and historicized violence occurring in the spaces of medical care. At the heart of valuing patients' dignities, we argue, is an ethical reorientation toward perspectival heterogeneity, through which the disciplined gaze of the physician must be ruptured and interwoven with the patients' emotions, hidden fears, which in turn may be grounded in historical enactments of disciplinary violence. Dr. Campbell gifts us a metaphor—*weaving*—to describe the relational and



emotional work at the heart of a medical diagnosis and care, which is particularly striking given that technological professions, including medicine, tend to “disappear” and devalue such work (Ducey, 2009; Fletcher, 2001).

Our analysis suggests that ethical-historical re-orientations of disciplinary practices (e.g., Dr. Campbell’s metaphor of weaving) are essential for *dismantling* (Sengupta, 2020) normative views of disciplinary authenticity that are enmeshed within an ethical neutrality of “proper conduct or action” (Stevens & Hall, 1998, p.109) of disciplinary practices. As Philip & Sengupta (2021) argued, notions of disciplinary authenticity that underlie and shape technoscience education typically center epistemic and representational work while ignoring, and worse, further invisibilizing oppression of endarkened people that enables “discipline” in the first place. Our work illustrates how paying attention to the ethical-historical traces of physician-patient interactions may help acknowledge histories of oppression *within* disciplinary practices in ways that affirm dignity of Indigenous people on whom these practices are being enacted. This is an image of a fundamental re-orientation of disciplinary practices in a technoscientific profession, and as an obvious corollary, has implications for reimagining disciplinary authenticity in the context of technoscience education through ethical-historical lenses.

## References

- Banerjee, P. (2022). *The Opportunity Trap: High-Skilled Workers, Indian Families, and the Failures of the Dependent Visa Program*. NYU Press.
- Bang, M., Curley, L., Kessel, A., Marin, A., Suzukovich, E. S., & Strack, G. (2014). Muskrat theories, tobacco in the streets, and living Chicago as Indigenous land. *Environmental Education Research*, 20(1), 37–55.
- Benjamin, R. (2019). *Race after technology: Abolitionist tools for the New Jim Code*. Polity.
- Bonilla-Silva, E. (2019). Feeling race: Theorizing the racial economy of emotions. *American Sociological Review*, 84(1), 1–25.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.
- Ducey, A. (2009). *Never good enough: Health care workers and the false promise of job training*. Cornell University Press.
- Ducey, A., Donoso, C., Ross, S., & Robert, M. (2020). From anatomy to patient experience in pelvic floor surgery: Mindlines, evidence, responsibility, and transvaginal mesh. *Social Science & Medicine*, 260, 113151.
- Espinoza, M. L., Vossoughi, S., Rose, M., & Poza, L. E. (2020). Matters of participation: Notes on the study of dignity and learning. *Mind, Culture, and Activity*, 27(4), 325–347.
- Fletcher, J. K. (2001). *Disappearing acts: Gender, power, and relational practice at work*. MIT Press.
- Halpern, S. (2004). *Lesser Harms: The Morality of Risk in Medical Research*. University of Chicago Press.
- Lawrence, J. (2000). The Indian health service and the sterilization of Native American women. *The American Indian Quarterly*, 24(3), 400–419.
- Lux, M. K. (2016). *Separate beds: A history of Indian hospitals in Canada 1920s-1980s*. University of Toronto Press.
- Mignolo, W. D. (2009). Epistemic disobedience, independent thought and decolonial freedom. *Theory, Culture & Society*, 26(7–8), 159–181.
- Mosby, I., & Swidrovich, J. (2021). Medical experimentation and the roots of COVID-19 vaccine hesitancy among Indigenous Peoples in Canada. *Canadian Medical Association Journal*, 193(11), 381–383.
- Philip, T. M., & Sengupta, P. (2021). Theories of learning as theories of society: A contrapuntal approach to expanding disciplinary authenticity in computing. *Journal of the Learning Sciences*, 30(2), 330–349.
- Stevens, & Hall, R. (1998). Disciplined perception: Learning to see in technoscience. In *Talking Mathematics in School* (pp. 107–150). Cambridge University Press.
- Sanyal, S., & Sengupta, P. (2022, April 21 – 26). *Of margins and migration in technological worlds*. [Paper presentation]. AERA Annual Meeting, 2022, San Diego, USA.
- Sengupta, P., Chokshi, A., Helvacı Ozacar, B., Dutta, S., Sanyal, M., & Shanahan, M. C. (2022). Language and symbolic violence in computational models of ethnocentrism: A critical phenomenology and Southern re-orientations. *International Journal of Qualitative Studies in Education*, 1-2.
- Sengupta, P. (2020). Re-Orienting Design: An Unbearable Pain. Invited talk, ICLS 2020. Obtained from: <https://www.isls.org/wp-content/uploads/pdfs/Re-Orienting-Design-Pratim-talk.pdf>
- Takeuchi, M. A., Sengupta, P., Shanahan, M-C, Adams, J. D., & Hachem, M. (2020). Transdisciplinarity in STEM education: A critical review. *Studies in Science Education*, 56(2), 213–253.
- Tuck, E. (2011). Humiliating ironies and dangerous dignities: A dialectic of school pushout. *International Journal of Qualitative Studies in Education*, 24(7), 817–827.
- Vossoughi, S., Jackson, A., Chen, S., Roldan, W., & Escudé, M. (2020). Embodied pathways and ethical trails: Studying learning in and through relational histories. *Journal of the Learning Sciences*, 29(2), 183–223.